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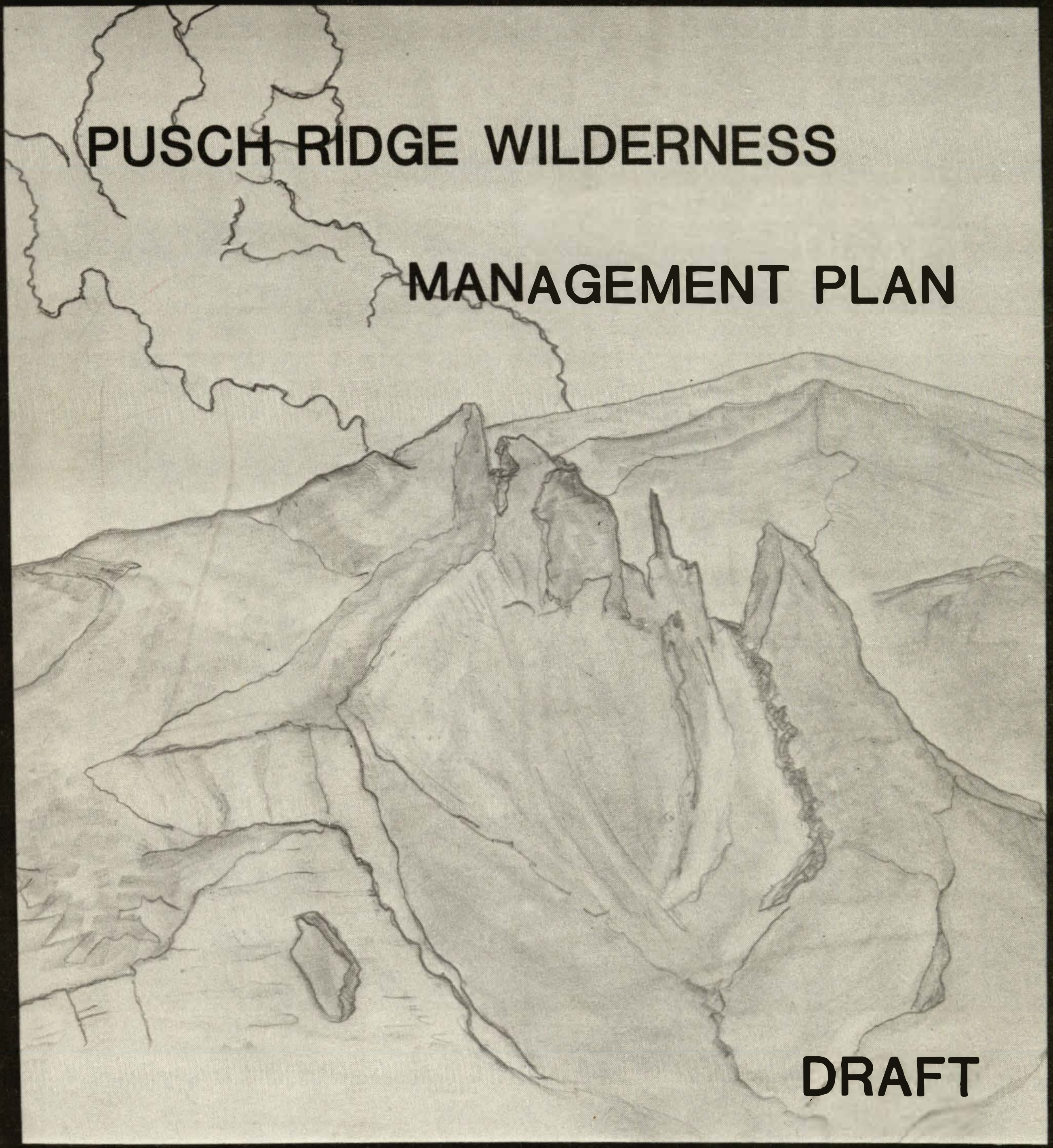
PUSCH RIDGE WILDERNESS

MANAGEMENT PLAN



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Page 22	See Page 21 for correct text

PUSCH RIDGE WILDERNESS

MANAGEMENT PLAN

USDA FOREST SERVICE
CORONADO NATIONAL FOREST
SOUTHWESTERN REGION

QH76.5
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PUSCH RIDGE WILDERNESS
MANAGEMENT PLAN

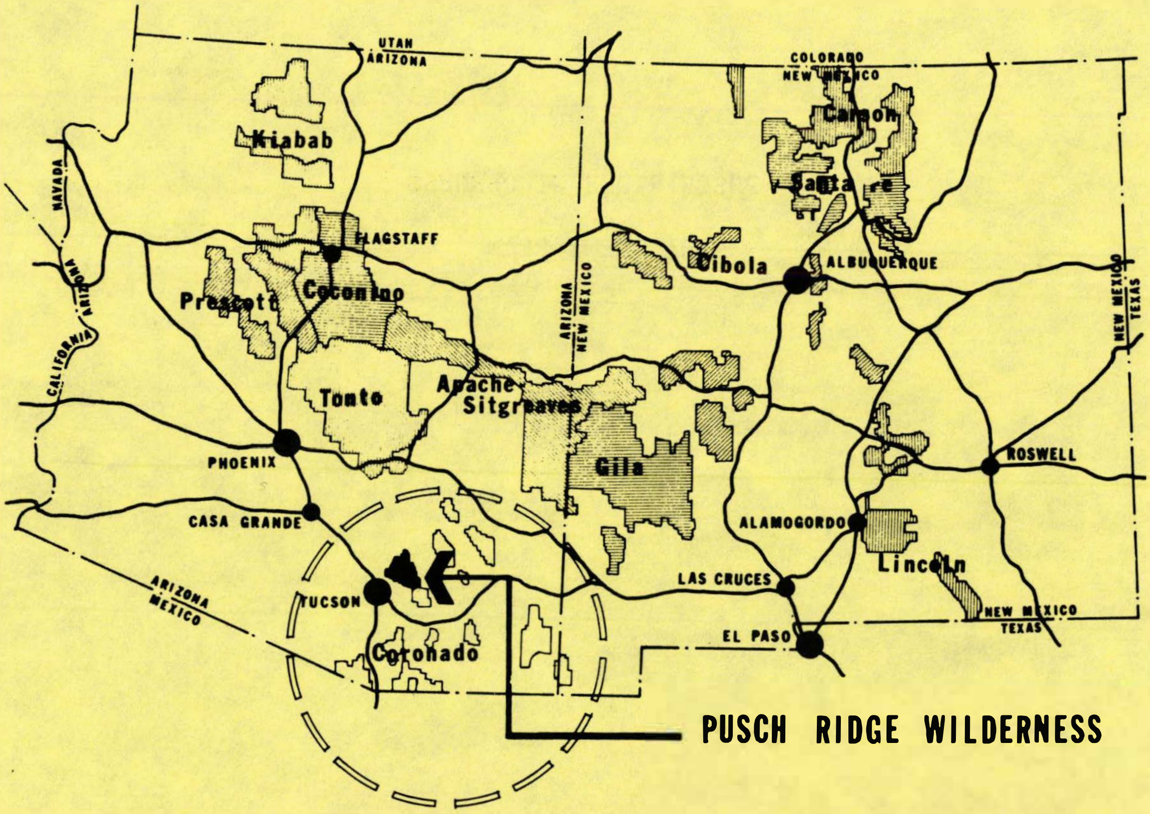
PREPARED BY ____________________
RECREATION & LANDS STAFF, SANTA CATALINA RANGER DISTRICT

RECOMMENDED BY ____________________
DISTRICT RANGER, SANTA CATALINA RANGER DISTRICT

RECOMMENDED BY ____________________
FOREST SUPERVISOR, CORONADO NATIONAL FOREST

APPROVED BY ____________________
REGIONAL FORESTER, SOUTHWESTERN REGION

NATIONAL FOREST SYSTEM
SOUTHWESTERN REGION
FOREST SERVICE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Gila
ROSWELL
CASA GRANDE
ALAMOGORDO
LAS CRUCES
Lincoln
TUCSON
EL PASO
Coronado
PUSCH RIDGE WILDERNESS

LOCATION MAP

PUSCH RIDGE WILDERNESS

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INTRODUCTION

Comprised of 56,430 acres of land located on the Santa Catalina Ranger District of the Coronado National Forest, the Pusch Ridge Wilderness provides a sharp contrast between the natural ruggedness of the Santa Catalina Mountains and the City of Tucson, Arizona, a rapidly growing metropolitan area of approximately 500,000 people. Located on the western portion of the Santa Catalina Mountain range, this area is highly prized for spectacular views from the city below. The area provides enjoyment to many who use this portion of the National Forest to satisfy needs for dispersed recreation opportunities. Included within the Wilderness boundary are the major drainages of Romero Canyon, Pima Canyon, Finger Rock Canyon, Ventana Canyon, Esperero Canyon, Sabino Canyon, Bear Canyon and portions of Cargodera Canyon. Pusch Ridge, a major promontory on the west end of the range, supports a small population of desert bighorn sheep, which are unique to this area.

Enacted into Wilderness by the "Endangered American Wilderness Act of 1978," Pusch Ridge became one of several areas set aside where "...undeveloped national forest lands exhibiting wilderness values are immediately threatened by pressures of a growing and more mobile population, large-scale industrial and economic growth, and development and uses inconsistent with the protection, maintenance, restoration, and enhancement of their wilderness character...."(1) As the growing metropolitan area of Tucson, Arizona, borders the Wilderness on the south and west sides, the above description indeed typifies the situation of the Pusch Ridge Wilderness.

The land base of the Wilderness is characterized by steep vertical rock faces and spectacular geologic formations of granitic origin. Soils are generally shallow and moderately high to highly erosive. Vegetation varies from Montane Conifer Forest in elevation areas above 7,000 feet, to Sonoran Desert Scrub in areas below the 4,000-foot level. Riparian vegetation is present in most of the major canyons. A vegetation and Life Zone display is included in the Appendix of this report on page 74. The Santa Catalina Mountains contain one of the most diverse wildlife resources found anywhere in the United States. Many species, endemic to the extreme southwestern United States and Mexico, are found which attract national attention, both for consumptive uses such as hunting, and nonconsumptive uses such as bird watching and photography.

Climatic patterns vary significantly from the 3,200-foot level to elevations in excess of 8,000 feet. Average annual precipitation ranges from 11 inches at the lower elevations, to 30 inches at the 8,000-foot level. Daily summer temperatures can vary by 30 degrees between the valley and the mountaintop. Snow accumulation is normally minimal, with snowmelt and increased streamflow occurring in March. During snowmelt periods when a rain-on-snow event

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[1] Public Law 95-237, February 24, 1978

occurs, severe flooding of stream channels may cause moderate to severe erosion. However, summer thunderstorms generally produce the most surface runoff, causing flood flow and channel erosion. All drainages flow into the Santa Cruz River Basin, which is a tributary of the Gila and Colorado Rivers. Both surface and channel runoff from the area are important to groundwater recharge. Some beneficial uses of this water are domestic consumption, agriculture and mining.

The Wilderness includes the 4,131-acre Santa Catalina Research Natural Area. This area, established in 1927 by the Secretary of Agriculture for protection and management of natural resource values, contains the popular area known as the Wilderness of Rocks. This area is popular as an overnight camping site because of the relatively flat terrain and the availability of water.

THE EXISTING SITUATION

Area Use Patterns

The Pusch Ridge Wilderness provides Pima County residents and other visitors an opportunity for a varied level of a dispersed recreation experience, from casual hiking to strenuous mountain climbing. Because of the steep terrain, most use is confined to canyon valleys or ridgetops. From vantage points located on promontories, such as Mount Kimball and Window Rock, large expansions of landscape can be viewed. When traversing the valley bottom, the Forest visitor is aware of the impressive sheer canyon walls that surround him, rising almost vertically for hundreds of feet.

Use of the Wilderness varies greatly from one area to another. Some locations, such as Seven Falls and Hutch's Pool, receive extremely heavy use during the warmer periods of the year when water is flowing in the canyons. These more heavily used areas can generally be characterized by sites which have well-established trailheads.

In contrast to the more heavily used sites are those areas where the Wilderness access is over a more primitive trail and trailhead access is hindered by private property, poor roads, or increased driving time from the City of Tucson. Romero Canyon, Ventana Canyon, Cathedral Rock and Window Rock are areas which exemplify these characteristics.

As a total unit, the Pusch Ridge Wilderness recorded 85,000 recreation visits in 1978. Of this use, it is estimated that about 7 percent of the users stay overnight in the area. This relatively low percentage of overnight use can probably be traced to the relatively small size of the Wilderness, and the short driving time to most of the more popular trail heads from the City. Lack of available drinking water may also play an important factor in limiting overnight use.

Uses vary by the season of the year. During the warmer periods of the year, from June to October, recreationists typically utilize the higher elevation areas, such as the Wilderness of Rocks, Marshall Saddle, Lemmon Rock and the upper portions of the Sabino Creek drainage. Cooler periods of the year, from November to May, find most visitors using sites at lower elevations.

Existing Facilities

Facilities within the Wilderness include 105 miles of trails, Sycamore Reservoir and Dam, man-made water catchments for wildlife water purposes, approximately 4 miles of barbed wire fencing and several developed spring boxes for recreation and wildlife purposes. All these facilities existed prior to the 1978 enactment of Wilderness status for the area.

Trails are primarily oriented toward foot travel, with trail conditions ranging from well-defined and maintained routes suitable for both foot and horseback travel, to barely definable paths, marked by rock cairns placed by previous hikers and suitable for only the experienced hiker. Most travel within the area is confined to the existing trail system because of the steep and rugged terrain.

All areas within the Wilderness were reserved as National Forest in 1902 and 1907. Thus, all water is claimed under the reservation principal. The existing inventoried sources include two perennial streams, three reaches of streams, 22 developed waters, and one reservoir. Of these developments, only the dam at Sycamore Reservoir exists as a structure of any magnitude. The impoundment created by the dam once served as a domestic water reservoir for a federal prison camp located in Soldier Canyon near the General Hitchcock Highway.

The roadway leading into Sycamore Reservoir is the only travel route included in the Wilderness upon which there has been vehicular travel in recent years. Originally constructed as a service road from the old prison camp site to Sycamore Reservoir, this highly visible road has now eroded to a condition where it is impassible by conventional vehicle.

Prior to enactment of the area's Wilderness designation, this road was closed to public motor vehicle travel. An additional travel route of similar character is located along portions of the powerline which forms the boundary of the Wilderness in Cargodera Canyon. This route provides access to the lower portion of the powerline and is generally excluded from the Wilderness.

Those fences within the Wilderness are remnants of prior grazing allotment commitments. As permitted grazing no longer generally occurs in the area, these fences are primarily nonfunctional. Forest boundary fencing occurs along the south and west borders of the Wilderness in various states of disrepair.

Exterior Land Influences

The Pusch Ridge Wilderness is bounded by numerous factors which influence the ability of the area to provide the desired recreation experience. These factors include the presence of existing recreation facilities, noise created by people and machinery, vehicle access routes, the proximity to an urban area, and existing commitments for use of the National Forest. Specifically, these elements include such developments as the Sabino Canyon Recreation Area, Tucson Rod and Gun Club Rifle Range, Laquachi Bowman Archery Range, Mount Lemmon Recreation Area, the General Hitchcock Highway, the City of Tucson electronic site, Cargodera Canyon powerline, and the general development of Pima County and the City of Tucson, Arizona. Specific descriptions of these impacts and their influences on the Pusch Ridge Wilderness follow.

Sabino Canyon Recreation Area includes the lower portions of the Sabino Canyon and Bear Canyon drainages adjacent to the southern boundary of the Coronado National Forest. This complex forms one of the most heavily used recreation areas in the Southwest. Although excluded from the Wilderness, it provides primary access into the southeast quadrant of the area. Trails lead to such popular places as Hutch's Pool and Seven Falls. The Sabino Canyon area includes four separately developed day-use sites and a visitor center, which collectively received a total of 670,000 recreation visits during the FY 1978 season. Vehicle transportation within the upper Sabino Canyon area is generally limited to a public transportation system operated by TWA Services Corporation, under a special use agreement. Although motor vehicles are currently allowed in the lower Sabino and Bear Canyon areas, plans call for the expansion of the public transportation system into these areas and the eventual elimination of private motorized transportation in the entire Sabino Canyon Recreation Area. Hiking and bicycling are also popular methods of accessing sites within the recreation area.

The Tucson Rod and Gun Club Rifle Range is located in Section 9, T13S, R15E, on the Coronado National Forest immediately adjacent to the Wilderness and the Sabino Canyon Recreation Area. Under a special use agreement, this range and facilities occupies an area of approximately 17 acres. Receiving approximately 20,000 recreation visits during FY 1978, the range is open to members and the general public seven days a week. Facilities include large and small bore pistol and rifle ranges and a trap range. Although not within the Wilderness, range firing can be heard several miles within the Wilderness, particularly in Esperero Canyon. At the present time, few complaints have been received concerning the noise from the range.

Located in the NW1/4SW1/4NW1/4 of Section 30, T12S, R14E, the Laquachi Bowman Archery Range encompasses 15 acres of National Forest land. The area is bordered on the north and east by the Wilderness boundary, and on the south by developed private land within the Forest boundary. The site is under permit to the Laquachi Bowman, a Tucson-based archery club and is utilized continuously throughout the year. Generally, there is no conflict between this use and Wilderness values at this time.

The Mount Lemmon Recreation Area, located at the top of the Santa Catalina Mountains, is comprised of several types of recreation facilities, including campgrounds, picnic areas, organization sites, recreation residences, observation sites, and the community of Summerhaven, Arizona, on Mount Lemmon. As a group, they accounted for 185,000 recreation visits during the FY 1978 season. It is necessary to travel through some portion of this area to reach trailheads leading into the north and northeast segments of the Wilderness, such as Lemmon Creek and the Wilderness of Rocks. Generally, the Wilderness boundary lies within one mile of this area of developed recreation use. Because it is upslope from the Wilderness and in areas of heavy ground cover and vegetation, fire suppression problems are anticipated in protecting life and property from wildfire. This problem will be accentuated by Wilderness classification of the area if the use of prescribed fire to control amounts of ground fuels is not permitted.

The General Hitchcock Highway provides access to the upper elevations of the Santa Catalina Mountains. Constructed from 1929 until the early 1950's, this two lane all-weather road roughly forms the rough boundary for the east and northern portions of the Wilderness. Spectacular views into the eastern parts of the Wilderness are available from pullouts along this route and from Windy Point, a popular developed recreation site.

Adjacent to the Wilderness boundary are the electronic sites of Radio Ridge located on Mount Lemmon, and the City of Tucson communications site located in the SE1/4SW1/4SW1/4, T12S, R14E. Both sites are visible from within the Wilderness and provide some reduction in visual quality due to their intrusion on the natural character.

The Cardogera Canyon powerline, a 15KV powerline providing electronic power to sites on Mount Lemmon and adjoining areas, is operated under permit by Trico Electric Cooperative. This facility and its accompanying cleared right-of-way are located along Cargodera Canyon from the Forest boundary to Mount Lemmon, and then to the Willow Canyon summerhome area. The Wilderness boundary follows this line from the Forest boundary in Section 25, T12S, R16E, to the Lemmon Rock lookout. The development is visible from the Cargodera Canyon Trail, but is not generally visible from major viewing points within the area.

Pima County residential development along the southern and western boundaries of the Wilderness have created trail access problems in areas such as Pima Canyhon and Ventana Canyon. As the land adjacent to these boundaries is considered prime land for development of moderate to high-cost housing, it is anticipated that total development of this area of private land will occur within the next 20 years. Currently, there are several areas where houses exist within 50 feet of the Wilderness boundary. Further development of housing in these areas will have increasing impacts on wilderness values and will intensify the need for management.

MANAGEMENT GOAL FOR THE PUSCH RIDGE WILDERNESS

The Pusch Ridge Wilderness will be managed under the provisions of the Wilderness Act to minimize the impact of man and his technology upon the Wilderness resource. Management actions will seek to minimize the impact of use on the wilderness resource. In this area, man will be a temporary visitor who leaves no permanent imprint of his use. The forces of nature will dominate the landscape and man's activity will be limited to that of an unobtrusive observer. Manipulation of the flora, fauna, or the surface of the land, destroys the wilderness resource and will be allowed only to the extent necessary to meet the conditions of the Wilderness Act.

Wilderness exemplifies freedom, but is defined more by the absence of human impact, than by an absence of human control. Management will seek to preserve spontaneity of use and as much freedom from regimentation as possible, while preserving the naturalness of the wilderness resource and an opportunity for solitude, primitive recreation, and scientific and historical values.

To the extent that the wilderness resourse is not impaired, the Pusch Ridge Wilderness will be managed to provide opportunities for primitive recreation featuring solitude, physical and mental challenge, freedom from the intrusion of unnatural sights, sounds, and odors; the chance to experience unmodified ecosystems, and to travel and live without mechanized aids in an environment where one's successes and failures are directly dependent upon his abilities, knowledge, and initiative.

THE WILDERNESS MANAGEMENT PLAN

This plan for the Pusch Ridge Wilderness provides general management direction for the 10-year period 1979-1989. An annual review and assessment will be made to determine relevancy of current situation statements and asumptions and revisions made, as necessary, to update the plan to current status.

Broad direction for wilderness management is established by the Multiple Use -Sustained Yield Act of June 13, 1960, and the Wilderness Act of September 3, 1964. The Multiple Use - Sustained Yield Act directs the management of National Forest lands under the principal of multiple use. Wilderness is specifically noted as a valid use of these lands. The Wilderness Act designates specific units of land for inclusion into the Wilderness Preservation System, provides authority for additions to the system, and sets forth guidelines for management.

In addition to these two Acts, management direction is also given in Department of Agriculture Regulations, and the 2300 section of the Forest Service Manual, which contains national and regional direction.

Utilizing these constraints and information derived from consultation with concerned members of the public and related agencies, this management plan establishes specific objectives reflecting local conditions and needs. An overall management goal has been stated for the Pusch Ridge Wilderness area. In the following section, this goal will be further defined to provide management objectives for specific facets of Wilderness management.

Each management objective will include a discussion of the Current Situation, Assumptions concerning various facets of management related to the objective being discussed, and specific Management Direction for that aspect of the wilderness management. These management directions will provide reference points for the wilderness manager for gauging his success in administration of the Pusch Ridge Wilderness. Specific Management Actions will then be noted for implementation of each management objective. The responsibility for the development of each item will be assigned to the line or staff officer charged with that particular area of responsibility in the District organization.

MANAGEMENT OBJECTIVES--FOR IMPORTANT ASPECTS OF WILDERNESS MANAGEMENT

I. Administration:

Management Objective: To be responsive to all challenges to the integrity of the existing wilderness resource with uniform and consistent administration by the Santa Catalina Ranger District, Coronado National Forest; to conduct necessary administration activities in a manner least damaging to the wilderness resource; and to minimize the effects of adjacent nonwilderness land management practices upon the Wilderness without negating the purpose for which practices are undertaken.

A. Current Situation

As a portion of the Santa Catalina Mountain range, the Pusch Ridge Wilderness is administered by the Santa Catalina Ranger District of the Coronado Nationa Forest, Southwestern Region, USDA Forest Service. Administrative responsibility for management of the Wilderness is vested with the District Ranger. Technical supervision of the wilderness resource management activity is provided by the District Recreation and Lands Staff Officer. On-the-ground activities, such as visitor contact, law enforcement, and the inventorying of visitor use, trail maintenance and resource protection, are accomplished primarily with seasonal employees. At the present time, this position provides only part-time coverage of the Wildernes, with most efforts concentrated in the upper elevation areas during the summer months. A recently organized volunteer mounted assistance unit also provides public contact and inventories trail conditions. Trail maintenance work is provided by a seasonally-employed trail maintenance crew, which accomplishes such tasks as clearing trails of encroaching vegetation and other hazards, and diverting water to prevent erosion.

Wilderness Boundary Description

As defined by Congress, the Pusch Ridge Wilderness includes approximately 56,430 acres. A rough boundary was delineated which is shown on a map in the Appendix of this report, on page 91 . The Pusch Ridge Wilderness is generally defined as that portion of the Santa Catalina Mountains west of the General Hitchcock Highway and south of Mount Lemmon and Cargodera Canyon. General exclusions were granted for the developed portion of the Sabino Canyon Recreation Area, the old federal prison camp above Molino Basin, the Laquachi Bowman Archery Range (15 acres), the City of Tucson electronic site (20 acres), and proposed trailheads at Pima Canyon, Romero Canyon and Finger Rock Canyon (20 acres each). During the development of this plan, the boundary was further defined to be located as follows:

1. One hundred fifty feet from the road or powerline, whichever is nearer, from the Forest boundary in Cargodera Canyon, east to the end of Radio Ridge.

2. Along the ridge north of Marshall Gulch, then southeasterly to Lizard Rock. A buffer zone avoids developed facilities at Marshall Gulch, Spencer Canyon, Organization Ridge, Rose Canyon and Willow Canyon.

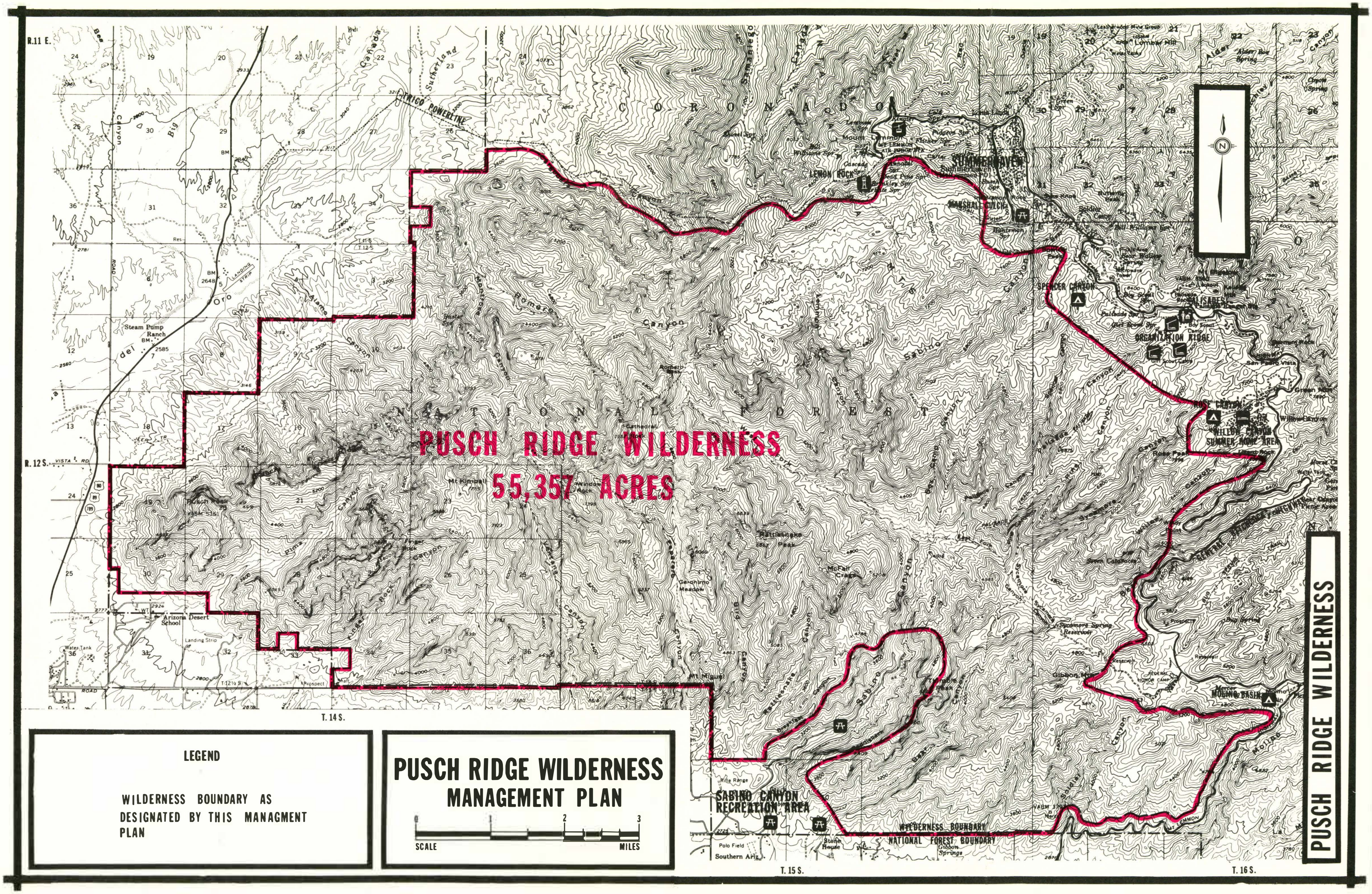
3. Where possible, the boundary, as described in 16 USC 482h, e.g., 400 feet from the centerline of the General Hitchcock Highway will be used from Lizard Rock to the southern Forest boundary.

A detailed map of the wilderness boundary recommended in this plan may be found on the following page.

It will be noted that the actual proposed wilderness boundary includes only 55,357 acres of National Forest land.

Access to the Wilderness is limited by private land development along the southern and western borders. Trail access to the wilderness boundary through private land is presently guaranteed by public right-of-way only to the Finger Rock Canyon trailhead off North Alvernon Way. Trailheads in Pima Canyon, Ventana Canyon, Romero Canyon and Cargodera Canyon require the crossing of private land without guaranteed access to reach the Forest boundary. All other trail heads into the Wilderness are reached by routes which traverse other portions of National Forest lands. The future development of the proposed Catalina State Park along the west boundary of the Wilderness, may present access problems to the Cargodera Canyon trailhead. Construction of a hiking trail through the park to Cargodera Canyon is a possibility that will be explored when the park becomes a reality.

At the present time, there is neither a trail registration system, nor a wilderness permit system for the area. Current use patterns do not seem to be creating significant negative impacts on wilderness resource values. Law enforcement problems center around indiscriminate littering, occasional trespass of motorized vehicles, such as motorcycles, and man-caused wildfires. The majority of these problems seem to be concentrated in the fringe areas of the Wilderness. The current "Pack-It-Out" approach to litter control seems to be


PUSCH RIDGE WILDERNESS
55,357 ACRES
CORONADO NATIONAL FOREST
PUSCH RIDGE WILDERNESS
SUMMERHAVEN
LEMON ROCK
MARSHALL GULCH
SPENCER CANYON
PALISADES
ORGANIZATION RIDGE
ROSE CANYON
WILLOW CANYON SUMMER HOME AREA
MOLINO BASIN
SABINO CANYON RECREATION AREA
WILDERNESS BOUNDARY
NATIONAL FOREST BOUNDARY
TRIGO POWERLINE
Steam Pump Ranch
Arizona Desert School
Romero Canyon
Sabino Canyon
Rattlesnake Peak
McFall Crags
Geronimo Meadow
Mt Kimball
Window Rock
Pusch Peak
Pima Canyon
Bear Canyon
Thimble Peak
Gibbon Mtn
Sycamore Spring Reservoir
R.11 E.
R.12 S.
T. 14 S.
T. 15 S.
T. 16 S.
N

LEGEND

WILDERNESS BOUNDARY AS DESIGNATED BY THIS MANAGMENT PLAN

PUSCH RIDGE WILDERNESS MANAGEMENT PLAN

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successful in the more remote areas where access requires a greater investment of time and energy.

Current search and rescue activities are coordinated with the Pima County Sheriff's Department. Because of steep and remote terrain, rescue operations are often complicated and require the occasional landing of helicopters within the Wilderness. Approval for each landing must be granted by the Forest Supervisor.

B. Management Assumptions

1. The population of Pima County and the surrounding area will continue to increase at a rapid rate. Because of this, there will be an increasing demand on the wilderness resource to provide a base for a wide variety of user needs.

2. Development of private land along the southern and western boundary will continue, creating further access problems to trail heads without deeded public access.

3. As user demand for the wilderness resource increases, there will be a proportionate need for an increase in wilderness administration.

   At the present time, there is a need for a full-time wilderness ranger position, supplemented by seasonal positions, to accomplish such tasks as trail maintenance, visitor contact, law enforcement, fire prevention, and the monitoring of various resource situations. Additional funding and personnel ceilings will be required to fill these positions and to provide a high standard of wilderness management.

4. Development along wilderness boundaries will continue, resulting in increased instances of trespass on Forest lands.

5. Although current use patterns do not indicate a need for control of visitor use by a permit system, future increases may warrant that such a system be implemented to protect wilderness values.

6. Development of the proposed Catalina State Park will influence patterns in Romero and Cargodera Canyons.

C. Management Policy

1. All Wilderness administrative activities will be carried out to minimize their effect on the wilderness environment and the experience of the wilderness user.

2. Environmental analysis reports will be developed for all projects or activities which affect any aspect of the wilderness resource. All proposed projects will give consideration to the goals and objectives established by this plan to assure a continuity of management.

3. Wilderness rangers will be competitively selected for desirable combinations of resource management knowledge, backcountry experience and skills, ability to work with the public and commitment to the preservation of the wilderness resource.

4. A close relationship will be maintained with all state, county and local agencies to provide a joint understanding of the wilderness purpose.

5. Those uses and/or activities applicable to the Pusch Ridge Wilderness covered by special provision in Section 4(d) of the Wilderness Act (aircraft use, prospecting, mining, water resource structures, and grazing) will be administered for minimum interference with natural ecological processes and other wilderness values--to the extent that such administration does not negate the intent of Congress in making the special provisions.

6. Natural conditions in parts of the Wilderness are already modified to some degree by the past activities of man. Where feasible, action will be taken to restore natural conditions.

7. Personal risks associated with adverse weather conditions, isolation, physical hazards, and lack of rapid communication and travel, are inherent in the wilderness and will not be minimized. The public will be informed of these hazards.

8. Wilderness managers will work cooperatively with the Pima County Sheriff's Search and Rescue Unit, and others involved in search and rescue activities to assure that a reliable system for emergency action exists.

9. The Forest Supervisor may approve use of motorized and mechanical equipment for emergencies, such as fire suppression, search and rescue (including the removal of bodies of dead persons), and law enforcement where "...it is obvious that the situation involves an inescapable urgency and need for speed beyond that available by primitive means...." (FSM 2326.11, July 1967). This approval will be granted by the Forest Supervisor or his acting.

Other uses of motorized equipment for administrative purposes must be approved by the Regional Forester or Chief on a case-by-case basis. The policy for the Pusch Ridge Wilderness will be to use motorized equipment in nonemergency situations only for the following purposes:

a. Rock drills to facilitate restoration or construction of trails where their use will further preservation of the wilderness resource more than alternative methods.

b. Helicopters where their use will result in less damage and impact on the wilderness environment than alternative methods, such as large pack strings for transportation of materials.

10. Forest Service managers will continue to seek the cooperation of county and state officials in securing guaranteed access to Pima County, Ventana Canyon, Romero Canyon and Cargodera Canyon trailheads.

11. A boundary survey will be implemented to establish the location of the wilderness boundary on-the-ground. Following this survey, a legal boundary description will be attached to this report.

12. Properly monument the wilderness boundary on-the-ground.

D. Management Actions

1. A Wilderness Operating Plan will be developed to provide the wilderness ranger with detailed guidelines for such activities as law enforcement, public contact, conducting visitor use samples, and trail maintenance standards.

   Responsibility: District Recreation and Lands Staff Officer

2. All wilderness management personnel will receive a minimum Level II law enforcement training.

   Responsibility: District Ranger

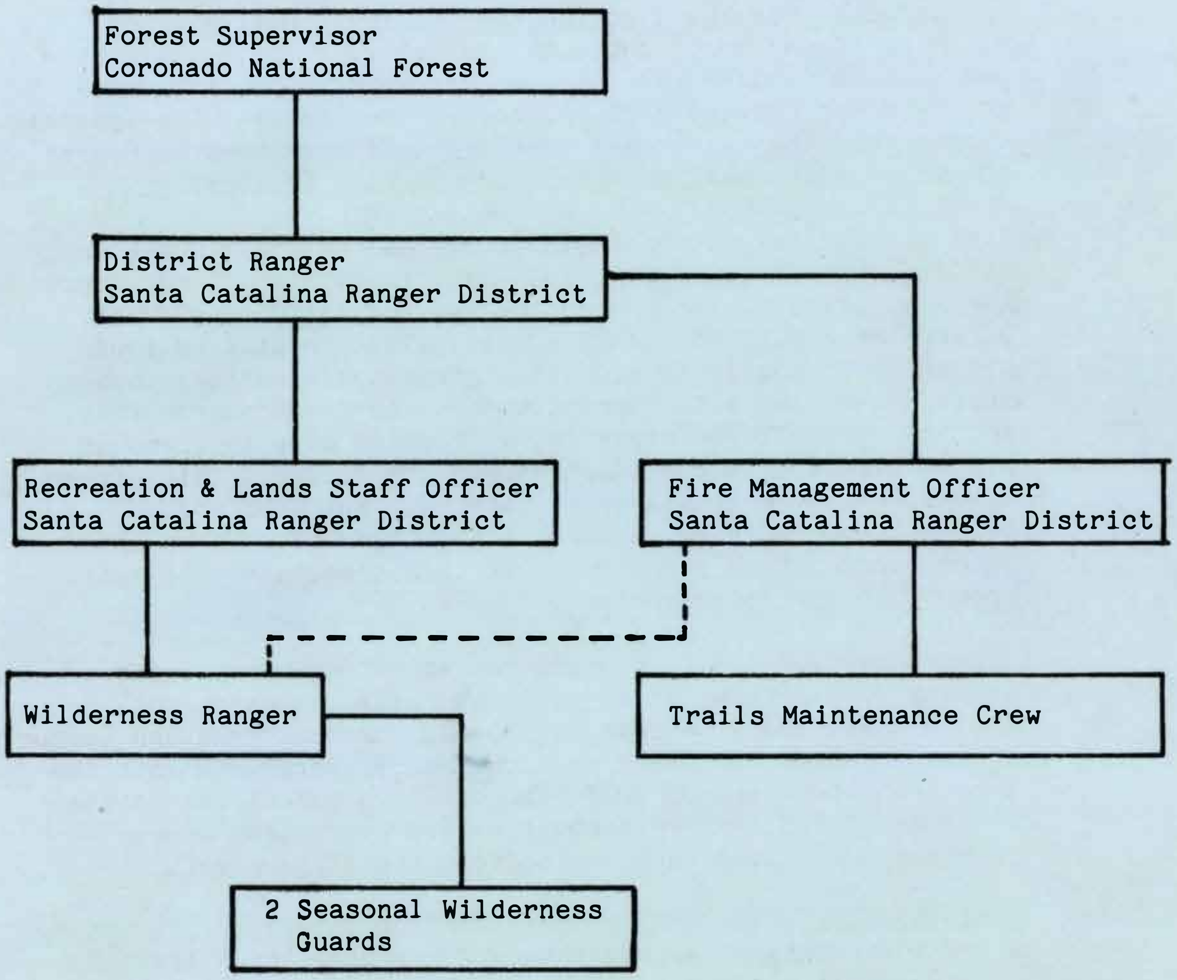
3. Visitor use and its impact on the wilderness resource will be monitored to assure that management goals and objectives set forth in this plan are maintained. If a mandatory permit or registration system is deemed necessary at a future time to protect these values, an EAR, including full public involvement, will be prepared prior to its initiation.

Responsibility: District Ranger

4. Prepare and implement a boundary survey and properly mark location on-the-ground.

   Responsibility: District Ranger

PUSCH RIDGE WILDERNESS ORGANIZATIONAL CHART


Forest Supervisor
Coronado National Forest
District Ranger
Santa Catalina Ranger District
Recreation & Lands Staff Officer
Santa Catalina Ranger District
Fire Management Officer
Santa Catalina Ranger District
Wilderness Ranger
Trails Maintenance Crew
2 Seasonal Wilderness Guards

------ Communication responsibility concerning trail conditions and fire management information.

II. Recreation

Management Objective: To provide opportunity for primitive recreation, featuring naturalness of the wilderness environment, solitude, physical and mental challenge, and inspiration consistent with preservation of the wilderness resource.

A. Current Situation

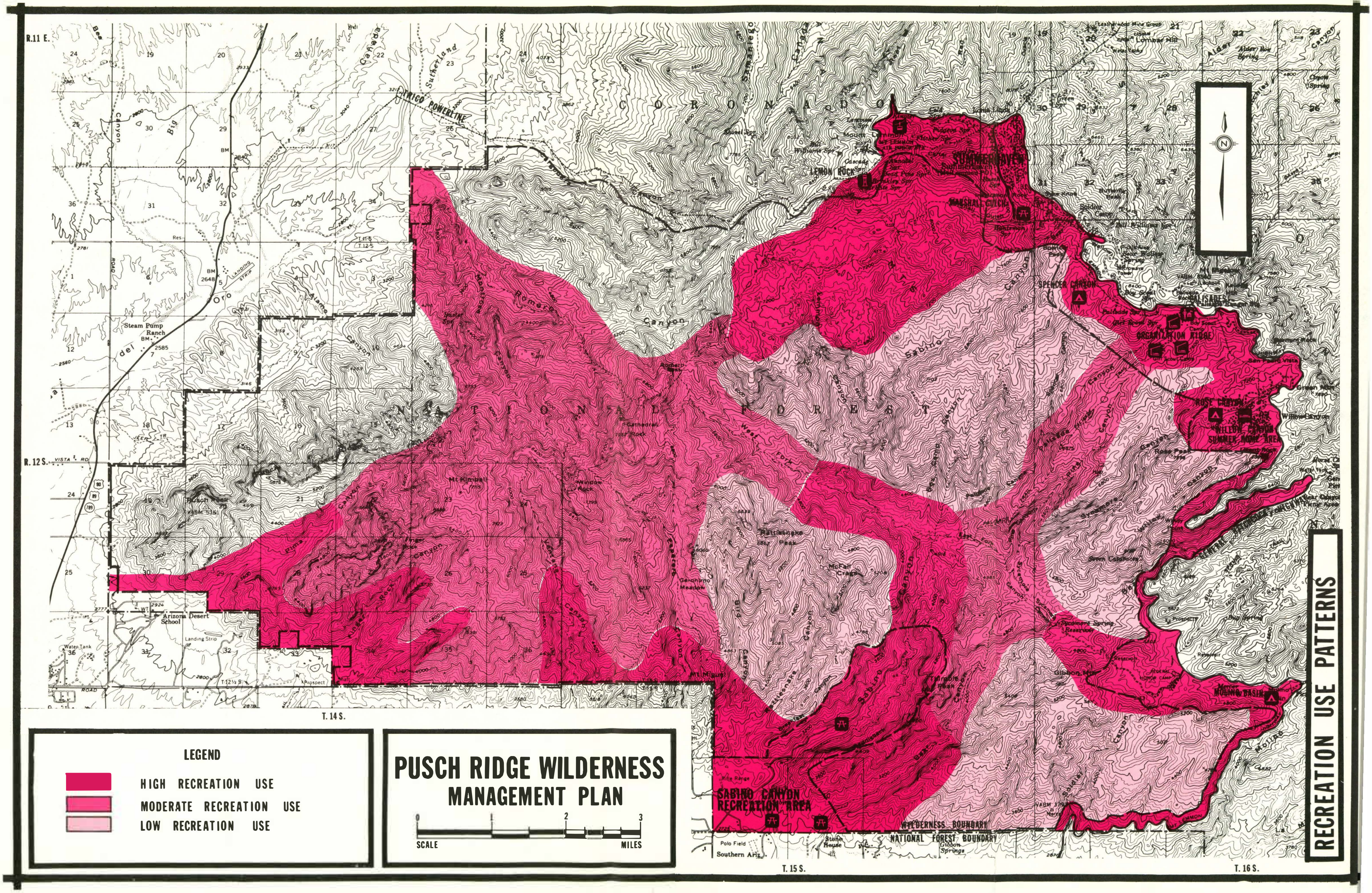
The Pusch Ridge Wilderness area supports a wide range of recreational activities and interests. Among these are backpacking, horseback riding, day hiking, hunting, rock climbing, fishing, photography and nature study. During the period from October 1977 through September 1978, the area received approximately 51,000 recreation visits. The typical outing into the wilderness usually lasts less than 12 hours and is made in small groups of one to four persons.

Time of year has an important effect on the individuals who utilize the wilderness. Season determines, to a large degree, the area selected for the outing and the activity pursued. During the spring and early summer, visitors will be found primarily in the lower elevation areas, particularly those areas associated with running water. As temperatures rise, and the streamflow diminishes, activities move to areas of higher elevation where temperatures are cooler. This higher elevation use continues until late into the fall when temperatures begin to subside in the lower elevations and water becomes more plentiful. At this time, use once again returns to the lower country.

Some recreation use is destination-oriented, with visitors seeking such popular sites as Seven Falls, Hutch's Pool, Window Rock, the Wilderness of Rocks, Marshall Peak and Lemmon Creek. Most of the users seek only a relaxing walk into the area for nature study, or for mental or physical relaxation. It is estimated that 25 percent of all recreation users penetrate more than three miles into the Wilderness.

Most visitors enter on foot from various entry portals. Only a small percentage (approximately 2 percent) enter the wilderness on horseback. This small usage is due to the rocky and steep terrain common to the Pusch Ridge area. Without extensive developments, most trails will not accommodate safe horse usage. Currently, there are no organized trail rides by outfitters into the Pusch Ridge area.

Several areas of the Wilderness receive significantly greater utilization than other portions. These include the first two miles of Bear Canyon (to Seven Falls), Sabino Canyon (to


R.11 E.
R.12 S.
T. 14 S.
T. 15 S.
T. 16 S.
CORONADO NATIONAL FOREST
TRICO POWERLINE
Sutherland
Canada del Oro
Big Wash
Steam Pump Ranch
Arizona Desert School
Landing Strip
Water Tank
Romero Canyon
Pima Canyon
Mt Kimball
Window Rock
Cathedral Rock
Geronimo Meadow
Mt Kimball
Rattlesnake Peak
McFall Crags
Sabino Canyon
Bear Canyon
West Fork
East Fork
Lemmon Rock
SUMMERHAVEN
MARSHALL GULCH
SPENCER CANYON
PALISADES
ORGANIZATION RIDGE
ROSE CANYON
WILLOW CANYON SUMMER HOME AREA
MOLINO BASIN
Soldier Canyon
Sycamore Reservoir
Gibbon Mtn
SABINO CANYON RECREATION AREA
WILDERNESS BOUNDARY
NATIONAL FOREST BOUNDARY
Stone House
Polo Field
Southern Ariz
Rifle Range
Molino
Agua Caliente Hill
Sabino Canyon

LEGEND

- ■ HIGH RECREATION USE
- ■ MODERATE RECREATION USE
- ■ LOW RECREATION USE

PUSCH RIDGE WILDERNESS
MANAGEMENT PLAN

SCALE 0 1 2 3 MILES

RECREATION USE PATTERNS

2. Present use does not indicate a need for horse corrals or holding facilities; therefore, such facilities will not be developed for public or commercial use.

3. Commercial outfitting into the Pusch Ridge Wilderness will not be permitted.

4. Regulations limiting visitor numbers will be preceded by efforts to reduce visitor impact by other means and will be put into effect only after all other reasonable measures have failed.

5. Wilderness management personnel will be oriented to special problem areas relating to dispersed recreation use. This will include dealing with on-site problems of of the disposal of litter and human body wastes. Managers will seek to educate visitors in the proper manner of disposal.

6. Any improvements related to recreation use must be necessary for the protection of the wilderness resource and not for the convenience of the user. Any such improvements will be constructed of native materials and blend with the natural setting.

7. It is recognized that there are those who will seek a wilderness experience free from contact with a large number of fellow users. To provide a wide range of visitor contact experience, the present recreation use patterns will be maintained. Informal controls will be utilized, such as variance in trail standards to perpetuate these use patterns.

D. Management Actions

1. Use will be monitored to evaluate impacts on the wilderness resource.

   Responsibility: District Recreation and Lands Staff Officer.

2. Should use indicate abuse of wilderness values, and informal methods fail to reduce these impacts, formal methods will be implemented to reduce impacts to acceptable levels.

   Responsibility: District Ranger

Hutch's Pool), Finger Rock Canyon (first two miles), Pima Canyon (first three miles), Marshall Gulch and the Wilderness of Rocks. These areas are characterized by higher quality trails and easy access to the trailheads.

In contrast, the upper portions of the Sabino Canyon Drainage, Romero Canyon, and Cargodera Canyon areas receive comparatively light use. These areas are characterized by a trail system of a lower standard than those previously mentioned and trailheads are not as accessible. A map defining areas of Low, Moderate and High recreation use follows.

Overnight camping generally occurs in areas where the terrain is relatively flat and where there is water. Such areas would include Bridal Veil Falls, the Wilderness of Rocks, Hutch's Pool, Sycamore Spring and the upper Pima Canyon Basin. At the present time, there are no developed campsite facilities within the Wilderness. Current use levels do not indicate a need for overnight camping use restrictions.

B. Assumptions

1. Unless altered by management, use will continue to concentrate at popular and heavily used locations.

2. The number of foot travelers will continue to increase at a faster rate than the number entering on horseback.

3. Existing visitor use patterns will continue, although numbers may increase in proportion to the growth of the Pima County area.

4. Most wilderness users reside in Pima County.

5. The definition of solitude varies from one person to the next. Most users of the Pusch Ridge Wilderness feel they can achieve a feeling of solitude within the Wilderness at current use levels.

6. User behavior can be modified by education, on-the-ground contact with wilderness rangers and indirect regulation.

C. Management Direction

1. At the present time, recreation use of the Pusch Ridge Wilderness is not in conflict with wilderness resource values. This use will be continually monitored to assure that these values are maintained.

3. A party-size limitation of 15 people will be applied on a blanket basis throughout the Wilderness. More restrictive limits may be set, if warranted. A stay limit of 14 days will be enforced.

   Responsibility: District Ranger

III. Trails and Travel

Management Objective: To provide a range of challenges to wilderness users through a broad spectrum of access opportunities, including cross-country travel, and trails of varying difficulty for horse and foot travel. These uses must minimize physical and visual impacts upon the land, conflicts among visitors, and concentrations of activities harmful to the wilderness resource.

A. Current Situation

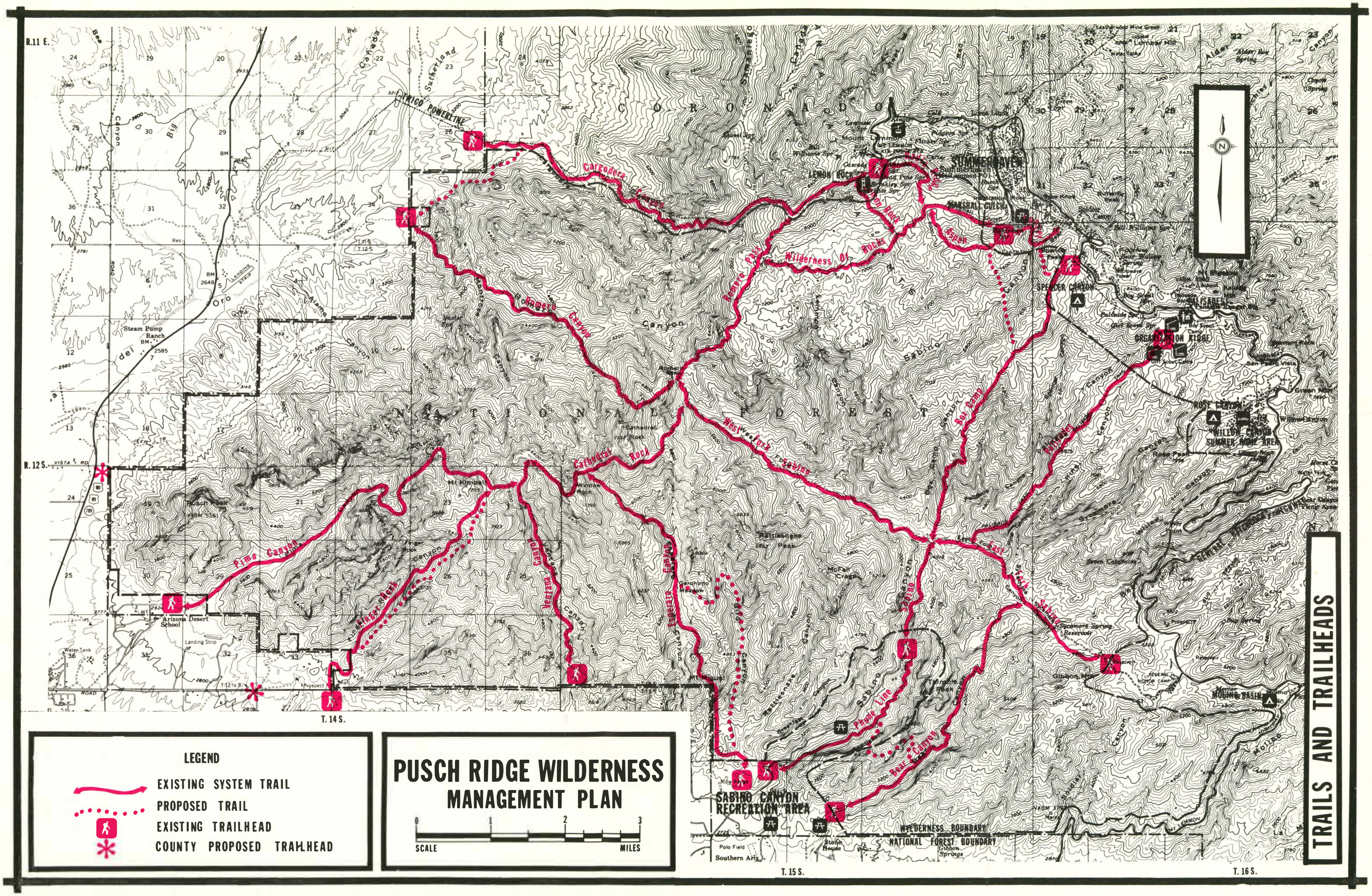
Access to the Pusch Ridge Wilderness is provided by numerous trails of varying standards which lead from the Wilderness boundary into the heart of the area. These routes are shown on a map on the following page. In 1977, a Santa Catalina Ranger District Trail Plan was prepared which examined developed and nondeveloped trails within the District and provided direction in the maintenance of the existing trail system and guidance in the provision of future trail additions.

In total, there are 105 miles of trail within the Wilderness. Major trailheads are located at the following sites:

Cargodera Canyon
Romero Canyon
Pima Canyon
Finger Rock Canyon
Ventana Canyon
Esperero Canyon
Marshall Gulch
Sabino Canyon
Bear Canyon
Soldier Canyon
Sycamore Dam
Palisades Ridge
Box Camp Ridge
Lemmon Rock

These trailheads include several which require access across private lands. Included in this group are Cargodera Canyon, Romero Canyon, Pima Canyon, and Ventana Canyon. Access to the Finger Rock trailhead is guaranteed by deeded public right-of-way.

In 1976, a "Trail Access Plan" was prepared by the Pima County Planning and Zoning Department. This plan specified, in detail, the needs for trail access into the Santa Catalina Mountains. In addition to the trailheads already noted, this plan specified additional access points from Linda Vista Road into the Pusch Ridge area, and from the end of Campbell Avenue into the Finger Rock Ridge area. It should be noted that this plan, as well as the Santa Catalina District Trail Plan, was developed prior to Pusch Ridge receiving wilderness status. However, both plans still generally reflect the need for exterior trailhead access and interior trail development.



R.11 E.
R.12 S.
T.14 S.
T.15 S.
T.16 S.
CORONADO
NATIONAL
FOREST
TWIGO POWERLINE
Cargodera Canyon
Romero Canyon
Romero Pass
Wilderness Of Rocks
Pima Canyon
Finger Rock
Ventana Canyon
Esperero Canyon
Cathedral Rock
West Fork Sabino
Box Camp
Palisade
East Fork
Sabino
Phone Line
Bear Canyon
Aspen
LEMON ROCK
MARSHALL GULCH
SUMMERHAVEN
SPENCER CANYON
ORGANIZATION RIDGE
PALISADES
ROSE CANYON
WILLOW CANYON SUMMER HOME AREA
MOLINO BASIN
SABINO CANYON RECREATION AREA
WILDERNESS BOUNDARY
NATIONAL FOREST BOUNDARY
Steam Pump Ranch
Arizona Desert School
Landing Strip
Big Wash
Canada del Oro
Sutherland
Sabino Canyon
Stone House
Polo Field
Southern Ariz.

LEGEND

- EXISTING SYSTEM TRAIL
- PROPOSED TRAIL
- EXISTING TRAILHEAD
- * COUNTY PROPOSED TRAILHEAD

PUSCH RIDGE WILDERNESS
MANAGEMENT PLAN

SCALE 0 1 2 3 MILES

TRAILS AND TRAILHEADS

In general, most existing trails are destination-oriented, with few opportunities for short-loop day hikes. The Trails Plan noted this need and proposed loop trails in the following locations:

1. Seven Falls to Sabino Canyon via Saddleback Ridge
2. Box Camp to Aspen Trail
3. Romero Trailhead to Cargodera Canyon
4. Bird Canyhon to Esperero Canyon
5. Pontatoc Canyon Trail to Finger Rock Canyon Trail
6. Sunset Trail to Box Camp Trail

Each of these trail additions was designed to provide for a certain need. The following is a brief description of each situation.

Seven Falls to Sabino Canyon. Establishment of this trail would require the construction of approximately 2.5 miles of trail. Completion of this trail would provide a 5.5-mile loop trail system connecting Lower Bear and Sabino Canyon recreation areas. Approximately one mile of this trail on the north face of Saddleback Ridge would be outside the Wilderness. The trail would provide a short-loop trail for day hiking which would give spectacular views of the desert valley and surrounding terrain.

Box Camp to Aspen Trail. This trail interconnect would require the construction of 2.7 miles of new trail to provide developed access to a route which had previously been an informal path. If completed, this loop would provide an 8-mile loop trail and also increase resource protection through the establishment of an identified trail and regular maintenance.

Romero Trailhead to Cargodera Canyon. This development would require the construction of 2.5 miles of new trail. Assuming the development of the Catalina State Park and the elimination of access to the Cargodera Canyon area, the trail addition would provide access to the existing Sutherland Trail in Cargodera Canyon and create a 20-mile loop for overnight hiking, beginning and ending at the same point.

Bird Canyon to Esperera Canyon. This route has been proposed to eliminate the section of the Esperero Trail which traverses a portion of private land in Section 5, T12S, R16E. This reroute would require reconstruction of approximately 1.5 miles of a route frequently used by the Southern Arizona Hiking Club to access the area.

Pontatoc Canyon Trail to Finger Rock Canyon. Establishment of this trail would require the construction of 4.4 miles of trail up Pontatoc Canyon to the intersection of the Pima Canyon-Finger Rock Trails. Portions of this route follow existing abandoned trail routes. Completion of this loop would provide day hiking opportunities utilizing an 8-mile loop beginning and ending at the Finger Rock Trailhead.

Sunset Trail to Box Camp Trail. This interconnect would require the construction of 1.0 mile of new trail near the Soldier Camp summer home area. If completed in association with the Box Camp to Aspen interconnect, this trail would provide an 8-mile loop system, beginning and ending at either the Box Camp Trailhead or the Marshall Gulch Trailhead.

Much of the existing trail system was developed to serve administrative needs of the Santa Catalina District. Other routes were established by miners and early settlers of the area seeking climatic relief in the cool temperatures of the Santa Catalina Mountains. Today, these routes form the basis of the trail system utilized by thousands of modern day recreationists.

Trails in the Wilderness may be characterized by two factors--high use and steep grades. These two factors combine to form a basis for the need of extensive and frequent trail maintenance. This maintenance is currently provided by a season trail crew, contributed fire management crews and frequently (or occasionally), by the fire prevention technician traveling through the area. Current levels of trail maintenance funding are not adequate to totally maintain the existing trails system.

Development and maintenance levels generally are of a lower standard as the trails move away from the trailheads into the more remote areas of the Wilderness. It should also be noted that as trail standards decrease, so does the level of visitor use. This factor of distance and trail standard may be a key factor in developing an informal method of visitor control, and at the same time, provide a moderate variety in user experience.

Trail maintenance problems are accentuated by steep terrain and a wide variety of soil conditions, ranging from hard rock to porous granitic soils. Some areas require the use of explosives and blasting for trail construction, while others require the extensive use of erosion control structures to prevent soil movement. These factors combine to prevent challenging situations for any proposed trail construction projects.

Trail use is generally confined to existing routes. Most of these routes are fairly well defined and part of the existing trail system. Some use of undefined routes does occur in the Pusch Ridge area, particularly in Alamo Canyon and in the vicinity of Table Mountain. This use, if uncontrolled, could have detrimental effects on the wilderness resource in terms of soil erosion and disturbance of the bighorn sheep.

B. Assumptions

1. Travel within the Wilderness will increase, particularly in the area of foot travel. Because of steep terrain, horseback use will increase only moderately over existing levels.

2. The design of the trail system and associated maintenance levels can help control the location, kind and intensity of use.

3. Certain areas will need to be kept without trails to provide the opportunity for unaltered wildlife behavior, and informal cross-country travel.

4. Unless controlled, informal marking and repeated use of certain cross-country travel routes will lead to the establishment of new nonsystem trails.

5. There is a definite need for the establishment of short (less than 10 miles) day hiking routes which begin and end at the same destination.

C. Management Direction

1. Continue to work with the Pima County Planning and Zoning Commission concerning implementation of the Pima County Trails Access Plan. This plan should be developed, as presented, with the exception of the proposal to create a trailhead at Linda Vista Road. This route should be discouraged on the basis that it provides access into an area without a defined route and intrudes on an area where the presence of man may disturb the bighorn sheep population inhabiting the west end of the Ridge.

2. Develop all proposed trail loop routes. These trails will be developed in the following priority:

   (1) Bird Canyon to Experero Canyon
   (2) Romero Trailhead to Cargodera Canyon
   (3) Seven Falls to Sabino Canyon
   (4) Box Camp to Aspen Trail
   (5) Sunset Trail to Box Camp
   (6) Pontatoc Canyon

3. Trail maintenance will be carried out on the zone concept noted under the Recreation section of this report. Those areas zoned for "High" use will have trails maintained to Level 3. Those areas zoned for "Low" to "Moderate" recreation use, will have trails maintained to Level 2. A description of these maintenance levels may be found in the Appendix of this report.

4. Horse use will be permitted on all trails maintained to Level 3 standards. Horse use will be discouraged on trails maintained to a Level 2 standard because of steep rocky terrain which is generally unsuitable for such use.

5. All trail structures will be composed of natural materials.

6. Cross-country travel in the vicinity of Pusch Peak and Table Mountain will be discouraged. Cooperation will be sought with the Southern Arizona Hiking Club to remove informal routes in these areas from their popular hiking map. On-the-ground efforts will be made to obliterate these routes to the extent that they are not readily visible.

D. Management Actions

1. Coordinate trail maintenance and construction projects with the Forest Engineer and the various field maintenance personnel, such as seasonal trail crews, wilderness rangers, YACC and YCC crews, and the Volunteer Mounted Assistance Unit.

   Responsibility: District Recreation and Lands Staff Officer. Coordinate with District Fire Management Staff Officer.

2. Develop a trails maintenance program to bring all trails up to standard and implement the proposed trail additions.

   Responsibility: District Fire Management Officer.

3. Work with the Southern Arizona Hiking Club to seek their cooperation in discouraging cross-country travel in the Pusch Ridge/Table Mountain area.

   Responsibility: District Ranger

IV. Signing

Management Objective: To provide for adequate resource protection, visitor orientation, and visitor dispersal with a minimum amount of signing.

A. Current Situation

At the present time, signing within the Pusch Ridge Wilderness does not conform to Forest Service wilderness signing policy. Existing wilderness standards dictate that rustic wooden signs, with routed character lightly charred to enhance their readability, will be mounted on appropriate mounts which are native to and in keeping with their setting. "...Square sawed posts will not be used...."(1) Due to the recent designation of the area into wilderness, existing signing meets standards for general Forest trail systems only, without regard to the primitive and rustic characteristics of the wilderness signing policy.

Existing information and administrative signing at wilderness portals and boundaries is generally substandard. Those signs that do exist, specify such messages as off-road vehicle restrictions, visitor orientation, and a general notification of the fact that the visitor is entering the Coronado National Forest. In general, this form of signing is not consistent with Forest Service signing policy.

Many portals include signs which are fabricated from plate steel and are mounted on tubular metal posts. These signs are used in areas where repetitive vandalism of wooden sign has prohibited their use. Although these metal signs do not meet wilderness signing standards, it would be a futile and continuing effort to maintain wooden signs within the Wilderness. The metal signs, when routed, are aesthetically acceptable and are nearly indestructible.

Current Forest Service signing policy may be found in Forest Service Manuals under designation 2323.61h and 7160, and in Forest Service Handbook 7109.11, Section 52.81. This signing policy should be utilized in almost all instances in keeping with the overall goal to preserve the naturalness of the wilderness resource and to allow the forces of nature to dominate the landscape.

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(1) FSM 2323.61h, November 1973, R-3 Supplement #37

B. Assumptions

1. Although there is a definite need for wilderness signing, there are conflicting views expressed by the public as to what will be signed, and where the signs will be placed.

2. The creation of a Pusch Ridge Wilderness map and brochure could greatly reduce the need for destination signing within the Wilderness.

3. Failure to properly sign wilderness portals and boundaries will result in uses which are in conflict with wilderness values.

4. Vandalism of signing will continue.

C. Management Direction

1. Signing needed for management and regulation of use will be installed to minimize both the physical impact of the signing system upon the wilderness resource, and the psychological impact on the Wilderness visitor.

2. Existing signing will be evaluated on a case-by-case basis for compliance with existing wilderness standards and for compatibility with on-the-ground situations. In locations of extremely high vandalism, metal signs will continue to be utilized or they will be replaced with others constructed of materials which deter vandalism.

3. Wilderness portal entry sign packages will be developed and will include trail direction information, wilderness boundary signs, and other official information related to user conduct, fire prevention, and wilderness regulations. These entry packages will be placed at all major trailheads leading into the Pusch Ridge Wilderness.

4. Signing will not be provided solely for user orientation, convenience, or education. The need for signing will be minimized through the development of an accurate and up-to-date trail map and brochure which will describe management expectations for visitor use and conduct.

5. Signs will be placed at:

    a. System trail junctions
    b. Area and trail closures
    c. Trailheads
    d. Wilderness boundaries

6. Signs will not be placed:

   a. In areas without trails
   b. On nonsystem trails
   c. To identify natural features
   d. To provide on-site interpretation.

7. The Wilderness boundary will be posted at minimal intervals of 600 feet (FSM 7153).

D. Management Actions

1. Within one year, develop a signing plan for the Pusch Ridge Wilderness. This plan will include an evaluation of all existing signs and where new ones are needed.

   Responsibility: District Recreation and Lands Staff Officer. Coordinate plan with the District Fire Management Officer.

2. Coordinate signing objectives with the development of the Pusch Ridge Wilderness trail map and brochure to reduce the need for descriptive and informational on-the-ground type signing.

   Responsibility: District Recreation and Lands Staff Officer.

3. Within one year, accurately post the entire Wilderness boundary.

   Responsibility: District Ranger.

4. Develop wilderness portal information stations which will be in keeping with wilderness goals and objectives. These stations will be placed at all major Wilderness trailheads.

   Responsibility: District Recreation and Lands Staff Officer. Coordinate with Forest Landscape Architect.

V. Information and Education

Management Objective: To make information about the Pusch Ridge Wilderness available to all persons requesting it, but without advertising or promoting its use; to divert use not dependent on wilderness values to alternative areas, and to provide information that will minimize the impact on the resource and encourage compliance with restrictions.

A. Current Situation

At the present time, there are no printed informational materials which specifically deal with the Pusch Ridge Wilderness. Existing Forest Service publications provide general educational information explaining the Forest Service concept of wilderness and recommended visitor behavior and ethics patterns for wilderness use in any area within the National Forest system.

Information concerning the biotic and abiotic characteristics of the area can be found in the form of scientific publications, college texts, and popular books discussing the plants, animals and geology of the general area. Much of this information has been developed by the University of Arizona and local authorities on the Santa Catalina Mountains.

Several maps are available which show the general area. The Santa Catalina Mountains are specifically covered by a Coronado National Forest recreation map published in 1976 and the popular Southern Arizona Hiking Club map for the Santa Catalina Mountains. This latter map shows details of topography, the existing trail locations, routes and trail mileages from point to point.

At the present time, a program does not exist which is specifically designed to contact the wilderness visitor within the area. Some contacts are made by fire prevention technicians, trail maintenance crews, and members of the Volunteer Mounted Assistance Unit.

It has been stated that formal designation of a wilderness increases the public awareness and interest in an area. The use of specific information concerning the Pusch Ridge area will provide a key management tool in gaining public acceptance and support of management objectives.

B. Assumptions

1. As the use of the Pusch Ridge area increases, there will be a greater demand for specific information concerning the area.

2. There is a need for the Forest Service to develop a user map specifically for the Pusch Ridge Wilderness. This map must be of the highest accuracy possible.

3. As visitor use increases, there will be an increasing need for visitor contact within the Wilderness by Forest Service personnel. These contacts will play an important part in protecting the wilderness resource from abuse. Careful personnel selection and training will be necessary to ensure that visitor contacts will enhance both the resource and the wilderness visit.

4. There will be an increasing need for a brochure which states specific information concerning the flora and fauna of Pusch Ridge. This information, as well as wilderness policy and ethics, could be incorporated into one document with the wilderness area map.

C. Management Direction

1. All District and Forest personnel (including wilderness rangers, trail fire prevention technicians, and District and Forest receptionists) will receive training concerning general Forest Service wilderness policy, management goals and objectives for the Pusch Ridge area. This information will be provided prospective wilderness visitors, encouraging appropriate behavior and increasing their understanding and appreciation of wilderness values. Where possible, prospective users not dependent on a wilderness setting, will be encouraged to seek alternative areas.

2. An information and education plan will be developed to seek visitor compliance with behavioral restrictions. This plan will stress self-compliance supplemented by periodic contacts with wilderness rangers, trail fire prevention technicians, and the volunteer mounted assistance unit.

3. Cooperation with the local news media will be sought to assure the accurate portrayal of information concerning the Pusch Ridge Wilderness area to the general public. News media contacts will stress a nonpromotional image of opportunities within the wilderness.

4. A user-oriented map will be developed which will provide the wilderness visitor with a quality guide to travel routes, distances, wilderness ethics, fire safety, conduct and information concerning the flora and fauna of Pusch Ridge. This information will be developed in

accordance with the management goals and objectives set forth in this plan.

D. Management Actions

1. Within two years, prepare a Pusch Ridge Wilderness trail map brochure.

   Responsibility: District Recreation and Lands Staff Officer.

2. Within one year, train all existing District and Supervisor's Office public contact personnel in general Forest Service wilderness policy, wilderness ethics and conduct, a general orientation to the Pusch Ridge Wilderness goals and objectives, and a general field orientation of the Pusch Ridge area.

   Responsibility: District Recreation and Lands Staff Officer.

3. Assemble a slide/tape presentation of the Pusch Ridge Wilderness area. This program should stress the management problems of the Pusch Ridge area and portray in pictorial form, the management goals and objectives for the area as set forth in this plan.

   Responsibility: District Recreation and Lands Staff Officer.

VI. Land Occupancy and Structures

Management Objective: To maintain the wilderness free from facilities and structures, except those necessary to protect the wilderness resource and achieve management objectives set forth in this plan, and those exceptions permitted by Section 4(d) of the Wilderness Act.

A. Current Situation:

As a land unit, Pusch Ridge Wilderness is relatively free of nonconforming structures. With the exception of those developments associated with Sycamore Reservoir, facilities generally relate to those associated with past grazing practices or wildlife management.

Originally developed as a reservoir to service the domestic water needs of the federal prison camp in Soldier Canyon near the General Hitchcock Highway, Sycamore Reservoir now serves as a popular site for warmwater fishing, camping and day hiking.

In addition to the masonry dam structure, related improvements include a metallic subsurface pipeline and an access road (with numerous metal culverts) approximately 1 1/2 miles in length. Because of the lack of use and maintenance, this road is highly eroded. A maintained system trail provides access to this same area. The road itself, presents the greatest single impact on wilderness values since it creates a highly visible scar on an otherwise natural landscape.

All existing water developments are considered as conforming to wilderness values. These developments are relatively small in scale and present a minimal impact. They also provide water for wildlife.

There are several land uses and related structures outside the Wilderness, but within the Forest boundary, which may have a direct effect on the Wilderness. These developments center around the electronics site on Radio Ridge, the City of Tucson communication facility in Section 33, T12S, R14E, and the Laquachi Bowman archery range in Section 30, T12S, R14E. The electronics sites provide a visual intrusion to the wilderness visitor. This intrusion is greater in the case of the Radio Ridge sites where the development is skylined against an otherwise undeveloped ridge line. The City electronics site is visible as one looks from the City toward the Wilderness. However, this development is painted a camouflaged configuration and screened against the background of the mountain, rendering it very unnoticeable. The City site is visible from within the Wilderness, but these views are screened against other developments in the Tucson area.

The Laquachi Bowman archery range is not in conflict with wilderness values since the development is minimal and fairly natural in appearance. An application has been received from the Club to increase the size of the range from 15 to 23 acres, with substantially more development.

There are several barbed wire fences within the Wilderness which were constructed to regulate permitted domestic livestock. As permitted livestock grazing is now generally excluded from the Wilderness, these fences are no longer needed.

Evidence of the old grounded telephone line from Palisades to Sabino and the old prison camp can be found within the Wilderness. Some of the wire used is scattered in these areas. This line is no longer used and should be removed.

Where the Forest and Wilderness boundary coincide, it is almost totally fenced. This occurs along the west and south sides.

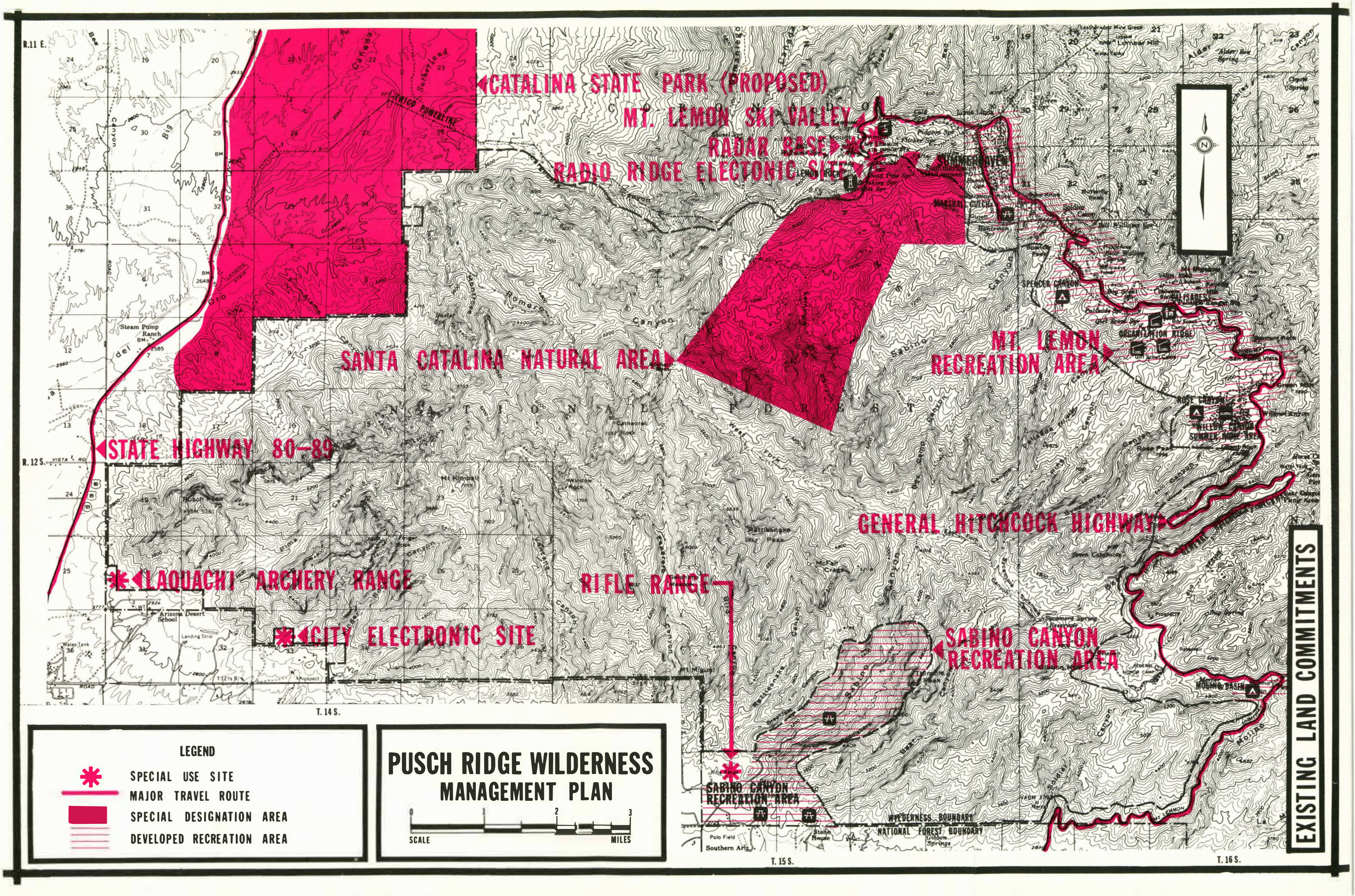
Mining is limited to a few isolated sites in Pontatoc Canyon and north of the Laquachi Bowman archery range. These sites are remnants of old prospect diggings and show no sign of recent activity. Although there is significant mineral exploration activity on the north and east sides of the Santa Catalina Mountains, there has been little activity in the Pusch Ridge area in recent history.

B. Assumptions

1. With the exception of the Sycamore Reservoir access road, unneeded fencing and the old telephone line, all existing structures within the Wilderness are compatible. Any future development will have to be carefully considered under the National Environmental Policy Act to assure that wilderness values are protected.

2. The 1983 deadline established by the Wilderness Act for filing of new minerals claims, could result in an increase in prospecting activities until that date.

3. The further development of additional electronic facilities and other structures outside the Wilderness may have a significant effect on the quality views of the landscape, both from within and without its boundaries.


CATALINA STATE PARK (PROPOSED)
MT. LEMON SKI VALLEY
RADAR BASE
RADIO RIDGE ELECTONIC SITE
SUMMERHAVEN
SANTA CATALINA NATURAL AREA
MT. LEMON RECREATION AREA
STATE HIGHWAY 80-89
GENERAL HITCHCOCK HIGHWAY
LAQUACHI ARCHERY RANGE
RIFLE RANGE
CITY ELECTRONIC SITE
SABINO CANYON RECREATION AREA
SABINO CANYON RECREATION AREA
TRICO POWERLINE
SPENCER CANYON
ORGANIZATION RIDGE
ROSE CANYON
WILLOW CANYON SUMMER HOME AREA
MOLINO BASIN
MARSHALL GULCH
WILDERNESS BOUNDARY
NATIONAL FOREST BOUNDARY
NATIONAL FOREST
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LEGEND
SPECIAL USE SITE
MAJOR TRAVEL ROUTE
SPECIAL DESIGNATION AREA
DEVELOPED RECREATION AREA
PUSCH RIDGE WILDERNESS
MANAGEMENT PLAN
0
1
2
3
SCALE
MILES
EXISTING LAND COMMITMENTS

C. Management Direction

1. All existing structures necessary for the protection and enhancement of the wilderness resource, will be retained. Maintenance on these structures will be by primitive means, using nonmechanized equipment. All other existing structures will be removed from the Wilderness.

2. No new roads, powerlines, telephone lines or other improvements will be permitted, except as authorized by Section 4(d) and 5(b) of the Wilderness Act. Should such a need arise, every effort will be made to minimize its effect on the wilderness resource.

3. Every effort will be made to coordinate the development of facilities outside the Wilderness boundary to reduce their impact on the visual quality of views from within the area and from outside viewing points which look toward the Pusch Ridge area.

D. Management Action

1. A restoration plan will be developed and implemented for the Sycamore Reservoir access road which will give specific details on enhancing the visual quality of the area asociated with this scar and to protect the existing soil and watershed resource values.

   Responsibility: District Recreation and Lands Staff Officer.

2. Within two years, an inventory of all facilities within the Wilderness will be developed, stating their location, existing condition, need for maintenance and a recommendation as to whether these facilities are consistent with wilderness values and whether they should, or should not, remain.

   Responsibility: District Ranger

VII. Fish and Wildlife

Management Objective: To provide for a natural distribution, diversity and abundance of native species of fish and wildlife by allowing natural processes to shape habitat and interactions among species, and to keep wild animals wild. Legal hunting and fishing will be carried out in a manner consistent with wilderness values through cooperative efforts with the Arizona Game and Fish Department.

A. Current Situation

Pusch Ridge Wilderness is the home of an extremely diverse spectrum of wildlife. This fact is made possible by the varied habitat types found within the area, and the position of the Santa Catalina Mountain range within the desert Southwest. Species endemic to the extreme southwestern United States and Mexico are found here. A diagram showing a partial listing of animal species and their relation to the habitat types of the Santa Catalina Mountains is found on page 74 of the Appendix. A more inclusive list of species is on page 75 of the Appendix.

Congressionally designated threatened and endangered species which presently utilize the Pusch Ridge area include the southern bald eagle and American peregrine falcon. These birds are not known to nest within the area, but can be seen as occasional migrants. Historically, the peregrine falcon nested in the vertical cliffs of the Lemmon Rock area. In addition to these species, the riparian plant communities support an extensive bird population of national significance to those who pursue the activity of bird watching.

The desert bighorn sheep is one of the most unique animals native to the Santa Catalina Mountains. This animal was first reported by early explorers of the region in the 1880's. This animal's range has become limited to the western portion of the Santa Catalina Mountains, including a portion of the Wilderness area. The immediate area around Pusch Ridge itself, is the primary occupied habitat. Population surveys include a stable herd, although there is some controversy over the exact herd size. Estimates of size range from 50 to 150 animals. There is an annual hunt, by permit only (normally three to four), of mature rams which is considered by the Arizona Game and Fish Department to be adequate to remove overmature animals and maintain a healthy herd. The Pusch Ridge desert bighorn herd is the only huntable population of this race of bighorn in the National Forest system. During earlier times, this animal was more abundant, but is now limited to several mountain ranges of the Southwest. It is considered by many as the most prized of big game trophies, and sportsmen from all over the United States attempt to obtain a permit to collect this unique bighorn. Hikers and photographers also climb into the Pusch Ridge area to glimpse or photograph this unique animal.

Javelina, mule deer and Coue's whitetail deer are additional big game species present in the area. These species are hunted on a permit-only basis.

The whitetail herd has been in the low position of a population cycle for several years, but there are indications that this trend is reversing. The long-term future of this beautiful deer appears in doubt because of encroachment on its habitat by mule deer. One of the basic reasons for the mule deer encroachment is felt to be the reduction in the variety of forage and cover species caused by lack of periodic fires. Man's influences (development) in the lower portions of the mule deer habitat have also contributed to this problem. Mule deer appear to be better adapted to the resulting altered habitat.

Turkeys were common at one time in the area, but were eliminated in the early 1900's prior to state hunting control. In 1940, turkeys were reintroduced and there are now several resident flocks. These birds spend most of their time in the higher elevations, and little is known of their occupied range in the Pusch Ridge Wilderness.

Black bear populations are considered to be low in the area. This is probably due to competition with humans in their prime habitat at higher elevations outside the Wilderness.

Mountain lions are known to exist in the area in fair numbers. These predators have large territorial requirements, thus, the total number of lions is probably less than 20. Deer are the prime food of these animals, and their numbers could be expected to increase if deer numbers were to increase.

Other predators in the area include bobcats and coyotes.

Quail, dove and rabbits are the primary small game species sought in the Pusch Ridge area. At one time, the unique Arizona grey squirrel was fairly common, but in 1942, with the population low, the Abert squirrel was introduced fom the northern part of the state. This squirrel is better adapted to the present habitat than the shyer grey squirrel.

The use of National Forest lands for bird watching is increasing at a tremendous rate. The Pusch Ridge Wilderness area is no exception. Numerous biotic zones and proximity to Mexico result in an avifaunal diversity seldom found in the United States. People come from all over the world to bird-watch in this area. Among the unusual birds which can be found periodically using the Pusch Ridge area are the golden eagle, prairie falcon, goshawk, Mearns' quail, elf owl, numerous hummingbirds, Arizona woodpecker, several flycatchers, painted redstart, and the bronzed cowbird.

There is a wide variety of reptiles and amphibians found in the Pusch Ridge area. Two unusual species which draw national attention are the desert tortoise and Gila monster.

Fishing opportunities are limited, but present within the Wilderness. Residual populations, remnants of past stocking programs, may be found in Lemmon Creek, Sabino Creek, and possibly Romero Canyon. Stocking programs have eliminated the once-native Gila trout. Mosquito fish have also replace the Gila topminnow. There is a definite need to reintroduce these native species, although reintroduction would require the eradication of introduced species prior to this effort. Warm-water fishing is provided at Sycamore Reservoir, where various species of bass and sunfish are present.

Habitat conditions have been altered by past grazing practices and the extensive effort to suppress all wildfire. Species affected by these factors include bighorn sheep, Coue's white-tail deer and various species dependent on upper elevation deciduous forests for existence. Some riparian zones have been influenced by heavy human use. These zones are critical for most desert wildlife. Compaction of soil and destruction of fragile plant life in the riparian zone could eventually lead to a reduction in the quality of these areas for wildlife habitat. Currently, this problem is not serious.

B. Assumptions

1. The suppression of all fires in the Wilderness will continue to have an adverse effect on wildlife habitat.

2. The encroachment of residential development on the boundaries of the Wilderness will increase the importance of this area for quality wildlife habitat and will influence ranges of various species.

3. The removal of livestock grazing that has occurred over the past several years, will have a beneficial effect on wildlife habitat.

4. There is a need to protect existing open space corridors in the Wilderness from trail development and other attractions which would draw recreation use into the area.

5. Wildlife populations are cyclical and may vary considerably from one year to the next.

6. Continued encroachment of human activity into the Pusch Ridge area may be detrimental to the bighorn sheep population.

7. There is a need to know more about the bighorn sheep and other wildlife species. Without this information, protection of these species will continue to be on a trial and error basis.

8. Wildlife waterings within the Wilderness are generally adequate.

C. Management Direction

1. Maintain a diversified wildlife spectrum. To the extent possible, manage recreation use to complement wildlife values.

2. Work with the Arizona Game and Fish Department and the University of Arizona to develop additional information on the desert bighorn sheep to determine habitat requirements and existing range, life patterns, herd size and composition, response to human intrusion, and other pertinent factors. This information is necessary to assure the continued existence of the herd.

3. Monitor the effects of recreation use on the riparian plant community.

4. The undeveloped area centering on Pusch Peak will remain undeveloped as open space to protect wildlife values.

5. A study will be implemented on the possibility of reintroduction of native species, particularly the Gila trout and Gila topminnow.

6. Wildlife values will be considered in the development of a natural fire plan for the area (see Fire, Insect and Disease section of this plan).

7. Wilderness users will be encouraged to stay on trails. Cross-country travel in the Pusch Ridge area will be discouraged.

8. Until more is known of the bighorn sheep population, mandatory use restrictions will not be implemented in the Pusch Ridge area. If studies warrant this need, they may be implemented to help control intrusion into the sensitive area utilized by the sheep.

D. Management Actions

1. Monitor recreation use patterns and implement use restrictions if the need arises to protect wildlife values.

   Responsibility: District Ranger

2. Prepare a study, utilizing the EAR process to determine the feasibility of the reintroduction of the Gila topminnow and Gila trout into sreams of the Pusch Ridge Wilderness.

   Responsibility: Range and Wildlife Staff Officer.

3. Coordinate efforts on wildlife study with the Arizona Game and Fish Department and the University of Arizona.

   Responsibility: District Ranger.

VIII. Vegetation

Management Objective: To maintain the system of natural processes that governs the distribution of plant communities, and ensures that natural processes operate freely.

A. Existing Situation

The Pusch Ridge Wilderness contains a wide variety of vegetative types. These types range from the Sonoran Desert Scrub Zone in areas below 4,000 feet elevation with light rainfall, through the Desert Grassland, Interior Chaparral, and Encinal Woodland Zones, to the Montane Conifer Forest Zone in areas above 6,000 feet where rainfall is generally more plentiful and may exceed 30 inches of precipitation yearly. The riparian plant community traverses all five of these types and provides an added dimension of interest to the Pusch Ridge area. Detailed descriptions of these plant communities, as described by Lowe and Brown, may be found in the Appendix of this report. A comparison of vegetative types and life zones may be found on page 87 of the Appendix.

Although vegetation occurs in a relatively natural condition throughout the Wilderness, several events have provided some degree of modification. Cattle grazing occurred over most of the lower elevations of the Pusch Ridge area until the 1960's. Overgrazing of some areas had a detrimental effect on wildlife due to competition for forage. Competition also occurred in riparian areas for food, water, shade and cover. At the present time, grazing has been eliminated in all areas of the Wilderness, except for a small area in the lower reaches of Cargodera Canyon.

The gradual elimination of fire from the area by more effective means of suppression has also reduced the diversity of plant communities. Some reversal of this trend is needed to maintain a species diversity important to many forms of wildlife.

Recreation visitor use of the area has provided some problems in maintaining natural plant communities in popular areas of concentrated use, such as around spring developments and heavily used trails. Additional problems occur from cross-cutting trails and indiscriminate cross-country travel.

Firewood is available at all sites. With a minimum of foraging for this material, campfire fuel needs may be easily met.

B. Assumptions

1. Continued suppression of all fires will reduce the diversity of plant communities and result in a plant composition that is more woody in nature.
2. Firewood may become more scarce as user traffic increases.
3. Informational and educational techniques can be utilized to reduce damage to vegetation due to human occupancy.
4. Plant diversity and quality will continue to improve in areas withdrawn from cattle grazing.

C. Management Direction

1. Native plant species will be identified and maintained.
2. Grazing of cattle, when established prior to classification of the Wilderness, will be continued under a grazing permit. Allowable use will be stated in the Allotment Management Plan.
3. The use of dead and down wood for firewood will be permitted. Cutting of green trees will be prohibited.
4. Cutting of trees and vegetation for trail construction and maintenance will be governed by levels established in Section III, Trails and Travel, of this plan.
5. Vegetative manipulation may include the control of non-native species, revegetation of disturbed sites, and correction of man-influenced changes which have been identified through research as being detrimental to wilderness values.
6. Through education of wilderness users, seek to establish an awareness of the role that plant communities play in the Wilderness' ecosystems, and an awareness of the need to correct problems where vegetative degradation has occurred.

D. Management Action

1. Within two years, identify plant communities and endangered or threatened plants which should be given special protection and recommend measures for protection.

   Responsibility: District Ranger

2. Within two years, identify plant communities and species which are benefited by fire and coordinate these requirements into the Natural Fire Plan proposed for Pusch Ridge.

   Responsibility: District Ranger

IX. Fire, Forest Disease and Insect Activity

Management Objective: To allow fire, disease, and insects to play a more natural role in the wilderness ecosystem, except where such activity will adversely affect resources adjacent to the Wilderness or human lives within the Wilderness.

A. Current Situation

Fire has played an important role in the history of the wilderness area in maintaining a diverse and viable ecosystem. Periodic fires have proved valuable in maintaining the diversity of habitat necessary for the perpetuation of various large and small game animals. It has been shown that certain plant and animal species are dependent on fire if they are to remain a permanent part of the ecosystem. The bighorn sheep and Coue's whitetail deer are two species that are particularly dependent on periodic fire. During the past 40 years, fire has been largely eliminated as part of the natural ecosystem. Aggressive action suppression action was generated, in part, by Forest Service mandate and influenced by the need to protect the highly developed Mount Lemmon recreation area and the community of Summerhaven where a potentially disasterous situation existed. This hazard has been tempered somewhat by current fuel management programs in the higher elevation/developed areas. Prescribed burning is being successfully utilized to reduce fuel concentrations near areas of heavy public occupancy and costly installations, such as campgrounds, summer home areas, and electronic sites.

The creation of the Pusch Ridge Wilderness placed some major restrictions on fuels management in the higher elevation areas since this activity is not currently allowed in an area under wilderness status in the National Forest system. Because the proposed Wilderness boundary falls within a quarter of a mile from some heavily developed areas, the buildup of fuels will continue, paving the way to a potentially disasterous wildfire. Fires occur primarily in the higher elevations north of Sabino Canyon. Based on a 20-year average, there are approximately 46 fires per year occurring within the total Wilderness area. About 40 percent of these fires are man-caused, with the remainder resulting from lightning.

Aspen is one species which is highly dependent on fire for its existence. Because it is not a climax species, elimination of fire from an area will eventually suppress the growth of aspen as it unsuccessfully attempts to compete with the encroaching conifer forest. Because aspen plays an important part in the plant and animal community, its elimination would be detrimental to some wildlife species. This species is also highly prized for its aesthetic appeal as an element of the landscape.

The existing natural resource base and structural development have been the basis for the recent determination of two suppression classes within the Wilderness. These boundaries and descriptions of each situation, are included in the Appendix of this report. These units could form the basis for the development of the natural fire plan for the Pusch Ridge Wilderness. At the present time, there is a definite need for the development of such a plan.

Insect and disease problems have not been significant in recent history. Although there have been spotty occurrences of mountain pine beetle infestations, these have not had a major effect on tree mortality. The present accumulation of ground fuels could provide a haven for the development of these pests.

B. Assumptions

1. Fire is an important part of the natural ecosystem.

2. As wilderness visitation increases, there will be a probable increase in the occurrence of man-caused fires.

3. In areas where fire occurrence continues to be interrupted, fuel accumulations will exist, and the potential for intense and/or large fires will increase.

4. There is a need to utilize prescribed burning to manage fuels accumulations in the Pusch Ridge Wilderness.

5. Air quality in the vicinity of the Tucson area may be affected by smoke from natural fires within the Wilderness.

6. Unless modified, the Congressionally proposed wilderness boundary will present fuels management problems in areas of high human occupancy.

7. Current insect and disease situations will remain stable.

8. Allowing the more natural role of fire, disease and insects in the wilderness ecosystem will permit the opportunity for a more natural composition.

9. Allowing fire to play a more natural role will provide a more desirable mosaic of plant types and successional stages.

C. Management Direction

1. Fire suppression activities will follow guidelines established by the Coronado National Forest Fire Management Suppression Guide. A natural fire plan will be developed to supplement this direction.

2. During fire suppression actions, protection of the wilderness resource will be a high priority. The control methods used will alter or disturb the land surfaces the least. Bulldozers will be used only to protect life or property and then, with prior approval of the Forest Supervisor/Regional Forester.

3. Airplanes, helicopters, and other motorized equipment may be authorized for control purposes, if deemed necessary by the District Ranger on initial attack and deemed necessary by the Forest Supervisor on project fires.

4. Fire demobilization will be by primitive means, unless determined by the Forest Supervisor that personnel and equipment are needed immediately for another fire emergency.

5. Outbreaks of insects or disease will not be controlled, except where there is a clear and imminent danger to timber or other values outside the Wilderness, and then, only by approval of the Chief of the Forest Service.

6. The effects of fires within the Wilderness will be monitored to determine their beneficial or detrimental effects on wilderness resource values.

7. Fire is recognized as a valuable tool in the maintenance of quality wildlife habitat. Efforts will be made to coordinate fire and wildlife values to achieve maximum beneficial effects.

D. Management Actions

1. Within one year, prepare a prescribed natural fire plan for the Pusch Ridge Wilderness.

   Responsibility: District Ranger

X. Water

Management Objective: To preserve water bodies and stream courses in a natural wilderness stae without modification or human-caused contamination.

A. Current Situation

Climatic patterns vary significantly throughout the elevation range of 3,200 feet to 8,000 feet found within the Wilderness. Average annual precipitation ranges from 11 inches to 30 inches. Daily summer temperatures can vary by 30 degrees between the valley floor and mountaintop. Snow accumulation, normally, is minimal, with snowmelt and increased streamflow occurring in March and April. During snowmelt periods, when a rain-on-snow event occurs, severe flooding of stream channels may cause moderate to severe erosion. High intensity summer thunderstorms generally produce the most surface runoff.

The Wilderness drains into the Santa Cruz River, which is a tributary of the Gila River. Both surface and channel runoff from the area are important to the groundwater recharge of the Santa Cruz basin. Some beneficial uses of this water include domestic needs, agriculture and mining.

Sabino Creek and Lemmon Creek are the only perennial streams in the Wilderness.

One impoundment, Sycamore Reservoir, is a popular attraction for recreationists. Other water developments in the area include springs, wells, small rock dams, and one water catchment with a metal tank. Most of these improvements were developed for wildlife and past livestock grazing.

Very little water quality monitoring has been conducted within the Wilderness. During periods of excessive surface runoff, high sedimentation occurs in the channel floor.

An intensive monitoring program in Upper and Lower Sabino Creek by the University of Arizona, shows there is presently a problem of water quality degradation caused by man's activity and occupation in areas outside the Wilderness. Although this impact occurs outside the area, in the vicinity of the community of Summerhaven, it is transmitted into the area by Sabino Creek. Current sewage treatment projects within the Summerhaven area should greatly improve this situation.

B. Assumptions

1. Water quality within the Wilderness will continue to be influenced by sources outside the area.

2. Water yield from the Pusch Ridge Wilderness will continue to play an important part in the recharge of the Santa Cruz Basin.

3. Water will continue to be an important factor in recreation use patterns.

4. There will be occasional conflicts between recreationists and wildlife needs for water.

5. Increasing use within the Pusch Ridge area may have a detrimental effect on water quality of streams due to increased siltation and bacterial contamination.

6. Existing water developments are adequate to serve existing recreation and wildlife needs.

The potential for large fires is great. Should a large fire occur, unacceptable sedimentation in major drainages could occur.

C. Management Direction

1. Watersheds will not be modified to provide increased water quantity or unnatural water quality.

2. Water quality measurements will be made with portable, nonpermanent equipment. Transportation of this equipment will be by primitive methods of travel.

3. Natural water quality levels will be identified and monitored to assure the objectives of this plan.

4. All wilderness management activities will provide for watershed protection and maintenance of natural water quality.

5. Contamination of springs, streams and reservoirs by recreation users and livestock will be minimized by education and enforcement.

D. Management Actions

1. Develop and implement a water quality monitoring system and establish bench marks for measuring Wilderness water quality.

   Responsibility: District Ranger

XI. Soils and Geology

Management Objective: To insure that the rate of soil erosion will not noticeably exceed natural background levels; and to allow processes of soil formation to operate unaltered by human activity.

A. Current Situation

As a part of the Santa Catalina Mountains, the Pusch Ridge Wilderness is a characteristic part of the Basin and Range Province. The area is identified by steep, mountainous topography created by an uplift that is strongly dissected by numerous drainages. Drainage of the Wilderness portion of the Santa Catalina Mountains is primarily to the south and west.

Major rock types of the area can be divided into three major types. They are: older precambrian granite, quartz monzonite, granodiorite and quartz diorite, cretaceous and tertiary gneiss derived mainly from intrusive rocks of early tertiary and late cretaceous age. Limestone is dominant in sediments, with a small portion of shale. This complex is referred to as the Apache Group.

The Pusch Ridge Wilderness has been mapped in soil surveys prepared in the early 1970's into soil units. These units are segments of the landscape that have similar soil profile characteristics, soil depths, slopes, vegetation and climatic conditions. Copies of these reports are on file in the Santa Catalina Ranger District office.

Soils in the Wilderness can be generally characterized as shallow and highly erosive. These factors, combined with slope characteristics that may exceed 60 percent, make soil management an important area of concern in the Pusch Ridge Wilderness.

Although extensive amounts of erosion are not occurring at the present time, the potential for this problem does exist. Areas of particular concern are those associated with heavily traveled trails and use sites. Minor amounts of erosion are presently occurring on some system trails which are in need of heavy maintenance. This problem is particularly common where hikers are crosscutting trail switchbacks.

B. Assumptions

1. Increased visitor use, without an accompanying increase in intensity of trail maintenance, will accelerate existing erosion problems.

2. Soil conditions are an important factor in the establishment of a healthy and vigorous vegetative cover.

3. Improper visitor conduct will continue to be the greatest threat to soil erosion.

4. Due to excessive fuel accumulations, the potential for a large fire is high. Should a large hot fire occur, associated erosion could be great.

C. Management Direction

1. Erosion resulting from natural processes will be allowed to continue.

2. The construction of new trails will avoid locations where high erosion potential exists.

3. Trail switchbacks will be used only where alternative methods of trail construction are not feasible.

4. Erosive conditions created by human activity will be corrected whenever possible.

5. Information and education efforts will seek to make wilderness users aware of soil problems and seek their help in preventing soil loss situations.

6. Wilderness personnel will inventory and log all existing erosion and potential erosion situations.

D. Management Action

1. All existing erosion situations will be inventoried and priorities assigned for management. This information will then be utilized in developing trail maintenance plans.

   Responsibility: District Fire Management Officer

XII. Collection of Resource and Use Information

Management Objective: To collect, in a nonobtrusive manner consistent with the preservation of the wilderness resource, recreational and resource use information necessary to:

1. Gain information needed to achieve and monitor the attainment of the objectives of this plan, and
2. Acquire baseline knowledge needed to assess long-range natural changes in the wilderness ecosystem, and man's direct and indirect influence on it.

A. Current Situation

Resource data on the Pusch Ridge Wilderness is very abundant in the general sense. Because of the uniqueness of the southwestern desert, many broad studies have been conducted concerning the biotic and abiotic resources of the area. Much of this work has been conducted under the research authority of the University of Arizona. Unfortunately, very little specific site information is available.

Man's influence on the bighorn sheep and the effects of fire on the total biotic community, are two areas of high public interest on which there is a lack of specific data.

Very little documented information exists on the impact of human occupation within the wilderness. There is a need for the establishment of permanent photo points and quadrant transects to establish baseline data from which to minitor use impacts.

Recent vertical aerial photos are available, in color, for the Pusch Ridge Wilderness. Orthophoto quadrangle maps are available for plotting existing resource information. Earth satellite monitoring images and infrared photography are also available from various government sources outside the Forest Service.

Current recreation use information is based on trail traffic counts located in Pima and Bear Canyons and upon field observation of use trends. There is a definite need to establish a more effective system of visitor use monitoring.

B. Assumptions

1. Basic resource and visitor use information will be needed to achieve the objectives of this plan and to monitor progress.

2. Funding for special studies to gain resource and use information will continue to be extremely limited and priorities will be needed for various informational needs.

3. There will be a need to implement systems to effectively collect recreation use information. A voluntary trailhead registration system would also be beneficial in collecting user data.

C. Management Direction

1. A list of specific resource informational needs will be developed and given priorities. Cooperation will be sought with the University of Arizona and the Arizona Game and Fish Department to assist in obtaining this information.

2. A system (Code-A-Site) will be implemented for the Pusch Ridge Wilderness. Permanent photo points will be established at heavily used sites to evaluate impacts on the resource occurring over time.

3. A volunteer self-registration system will be implemented at all wilderness entry points to assist wilderness managers in determining actual visitor use data.

4. Specific information will be developed concerning composition, population, distribution and behavioral characteristics of the bighorn sheep population. This item will be given high priority over other resource data needs.

D. Management Action

1. Seek cooperation of the Arizona Game and Fish Department and the University of Arizona in developing specific resource data needs.

   Responsibility: District Ranger

2. Develop a volunteer self-registration system for Pusch Ridge Wilderness.

   Responsibility: District Recreation and Lands Staff Officer.

3. Within one year, implement "Code-A-Site" in the Pusch Ridge Wilderness.

   Responsibility: District Recreation and Lands Staff Officer.

XIII. Cultural and Historical Resources

Management Objective: To recognize that cultural and historic resources within the Pusch Ridge Wilderness are valuable non-renewable resources, and to protect these resources in compliance with federal and state law.

A. Current Situation

The earliest known culture in the area of Pusch Ridge was the Hohokam Indians. It is speculated that these people used the lower canyons of the Santa Catalina Mountains to escape the heat of the valley, to hunt, and to gather food products such as jojoba nuts. These Indians disappeared from the area about 1500 AD.

The Spanish missionary, Father Kino, who was in the area around 1697 AD, is credited with naming the Santa Catalinas. The U.S. Army was one of the earliest users of the Santa Catalinas. In the 1870's, Army rest camps were established in the mountains, away from the heat of the desert. Civilian recreational use of the area soon followed. Uses, in the early days, were by hardy individuals who hiked or rode horseback into the mountains, seeking relief from the heat of the valley floor. These people established travel routes and certain uses.

Pusch Ridge, a prominent landmark on the west side of the Santa Catalinas, received its name from a German-born cattle rancher, George Pusch, who established the Steampump Ranch near the area in the 1870's.

The Santa Catalina Mountains were given Forest Reserve status in 1902, and became part of the Coronado National Forest in 1908, when the National Forest Act was passed.

Motorized access to the upper elevation areas of the mountains was achieved about 1918, with the construction of the Old Control Road, which connected with the community of Summerhaven with the town of Oracle, Arizona. The popular General Hitchcock Highway, which provides access to most of the higher elevation trailheads into the Wilderness, was completed in 1950.

There have been few intensive archeological studies conducted within the Pusch Ridge area. Although sites are known to exist, they have not been well documented.

B. Assumptions

1. Continued documentation of events occurring within or adjacent to the Wilderness will be of value.

2. It is likely that valuable archeological sites occur within the Pusch Ridge Wilderness.

3. Unless properly documented and protected, the potential exists for the total destruction of sites of valuable cultural significance.

C. Management Direction

1. All activities within the Wilderness will comply with the provisions of Executive Order 11593 and the National Historic and Preservation Act of 1966.

2. Prohibit unauthorized digging in, excavating, disturbing, injuring or destroying any archeological, paleontological, or historic site, or removing, disturbing, injuring, or destroying an archeological, paleontological or historical object (36 CFR 261.9(e)).

3. Study or management of sites discovered in the wilderness will not normally include any excavating, restoration, perpetuation, or on-site interpretation activities, except as necessary to comply with Executive Order 11593 and the National Historic Preservation Act of 1966.

D. Management Action

1. Insure compliance with all provisions of Executive Order 11593 and the National Historic Preservation Act of 1966.

   Responsibility: District Ranger

XIV. Scientific Study

Management Objective: To provide for and encourage scientific study that is dependent on a natural setting; that seeks to explain wilderness phenomena; and that is conducted in a nonobtrusive manner consistent with the preservation of the wilderness resource.

A. Current Situation

The Pusch Ridge Wilderness encompasses the Santa Catalina Research Natural Area. This research area, comprising 4,131 acres of land, was established March 23, 1927, for the purpose of "...scientific studies of forest growth...." Records show that it was the first of its kind established in the State of Arizona.

Research Natural Areas are established in areas that are unmodified by man and typify examples of certain biotic systems. The intent of this administrative classification by the Secretary of Agriculture, was to protect the area from modification by man's activities and to allow the area to be "studied" for scientific purposes. Records show that no research is presently active in this classified area, and very little has been accomplished in the past.

Guidelines for management of natural areas suggest that recreation activities be discouraged in natural areas. Traditionally, the Santa Catalina area has not been managed to the exclusion of recreationists. It should be noted that the area includes the Wilderness of Rocks, one of the most popular and heavily used areas in the Pusch Ridge Wilderness. Numerous trails also dissect the area.

Although the Santa Catalina Research Natural Area was set aside for research in an unmodified forest environment, the present wilderness designation sets the entire Pusch Ridge into a category where "...the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain...." As mentioned previously in this plan, there are several areas of concern where scientific information about the area would be helpful in management of the resources of the Pusch Ridge Wilderness.

B. Assumptions

1. Basic social and natural resource information is crucial to intelligent management decisions, and the development of such information pertinent to the Wilderness should be encouraged.

2. Many answers to administrative problems can be obtained only through systematic study and research.

3. The environment of the Santa Catalina Research Natural Area does not meet current criteria for a research study area.

4. Forest Service funds for wilderness research will continue to be limited.

C. Management Direction

1. Only those applications for research that are compatible with the goals and objectives of this plan will be approved. Research activities which compromise the wilderness resource on a permanent or long-lasting basis, will not be approved.

2. Data, collected for management purposes, such as use figures and ecological data, will be made available to scientists and others for purposes of scholarly research and legitimate constructive studies.

3. Based on lack of past and current scientific interest in the Santa Catalina Research Natural Area and the heavy use of recreationists in the area, it is recommended that the administrative classification of Research Natural Area be terminated.

4. Seek the cooperation of all areas of the scientific community in the development of a scientific data base for the Pusch Ridge Wilderness.

D. Management Action

1. Recommend to the Regional Forester that the Research Natural Area classification be eliminated for the Santa Catalina area.

   Responsibility: Forest Supervisor

APPENDIX

Wilderness Act

- **Act of September 3, 1964 (78 Stat. 890; 16 U.S.C. 1131–1136)**

Sec. 1. This Act may be cited as the "Wilderness Act" (16 U.S.C. 1121 (note))

Sec. 2. (a) In order to assure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify, all areas within the United States and its possessions, leaving no lands designated for preservation and protection in their natural condition, it is hereby declared to be the policy of the Congress to secure for the American people of present and future generations the benefits of an enduring resource of wilderness. For this purpose there is hereby established a National Wilderness Preservation System to be composed of federally owned areas designated by Congress as "wilderness areas", and these shall be administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection of these areas, the preservation of their wilderness character, and for the gathering and dissemination of information regarding their use and enjoyment as wilderness; and no Federal lands shall be designated as "wilderness areas" except as provided for in this Act or by a subsequent Act.

(b) The inclusion of an area in the National Wilderness Preservation System notwithstanding, the area shall continue to be managed by the Department and agency having jurisdiction thereover immediately before its inclusion in the National Wilderness Preservation System unless otherwise provided by Act of Congress. No appropriation shall be available for the payment of expenses or salaries for the administration of the National Wilderness Preservation System as a separate unit nor shall any appropriations be availalbe for additional personnel stated as being required solely for the purpose of managing or administering areas solely because they are included within the National Wilderness Preservation System.

(c) A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this Act an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value. (16 U.S.C. 1131)

Sec. 3. (a) All areas within the national forests classified at least 30 days before the effective date of this Act by the Secretary of Agriculture or the Chief of the Forest Service as "wilderness", "wild", or "canoe" are hereby designated as wilderness areas. The Secretary of Agriculture shall—

(1) Within one year after the effective date of this Act, file a map and legal description of each wilderness area with the Interior and Insular Affairs Committees of the United States Senate and the House of Representatives, and such descriptions shall have the same force and effect as if included in this Act: *Provided however*, That correction of clerical and typographical errors in such legal descriptions and maps may be made.

(2) Maintain, available to the public, records pertaining to said wilderness areas, including maps and legal descriptions, copies of regulations governing them, copies of public notices of, and reports submitted to Congress regarding pending additions, eliminations, or modifications. Maps, legal descriptions, and regulations pertaining to wilderness areas within their respective jurisdictions also shall be available to the public in the offices of regional foresters, national forest supervisors, and forest rangers.

(b) The Secretary of Agriculture shall, within ten years after the enactment of this Act, review, as to its suitability or nonsuitability for preservation as wilderness, each area in the national forests classified on the effective date of this Act by the Secretary of Agriculture or the Chief of the Forest Service as "primitive" and report his findings to the President. The President shall advise the United States Senate and House of Representatives of his recommendations with respect to the designation as "wilderness" or other reclassification of each area on which review has been completed, together with maps and a definition of boundaries. Such advice shall be given with respect to not less than one-third of all the areas now classified as "primitive" within three years after the enactment of this Act, not less than two-thirds within seven years after the enactment of this Act, and the remaining areas within ten years after the enactment of this Act. Each recommendation of the President for designation as "wilderness" shall become effective only if so provided by an Act of Congress. Areas classified as "primitive" on the effective date of this Act shall continue to be administered under the rules and regulations affecting such areas on the effective date of this Act until Congress has determined otherwise. Any such area may be increased in size by the President at the time he submits his recommendations to the Congress by not more than five thousand acres with no more than one thousand two hundred and eighty acres of such increase in any one compact unit; if it is proposed to increase the size of any area by more than five thousand acres or by more than one thousand two hundred and eighty acres in any one compact unit the increase in size shall not become effective until acted upon by Congress. Nothing herein contained shall limited the President in proposing, as part of his recommendations to Congress, the alteration of existing boundaries of primitive areas or recommending the addition of any contiguous area of national forest lands predominantly of wilderness value. Notwithstanding any other provisions of this Act, the Secretary of Agriculture may complete his review and delete such area as may be necessary, but not to exceed seven thousand acres, from the southern tip of the Gore Range-Eagles Nest Primitive Area, Colorado, if the Secretary determines that such action is in the public interest.

(c) Within ten years after the effective date of this Act the Secretary of the Interior shall review every roadless area of five thousand contiguous acres or more in the national parks, monuments and other units of the national park system and every such area of, and every roadless island within, the national wildlife refuges and game ranges, under his jurisdiction on the effective date of this Act and shall report to the President his recommendation as to the suitability or nonsuitability of each such area or island for preservation as wilderness. The President shall advise the President of the Senate and the Speaker of the House of Representatives of his recommendation with respect to the designation as wilderness of each such area or island on which review has been completed, together with a map thereof and a definition of its boundaries. Such advice shall be given with respect to not less than one-third of the areas and islands to be reviewed under this subsection within three years after enactment of this Act, not less than two-thirds within seven years of enactment of this Act, and the remainder within ten years of enactment of this Act. A recommendation of the President for designation as wilderness shall become effective only if so provided by an Act of Congress. Nothing contained herein shall, by implication or otherwise, be construed to lessen the present statutory authority of the Secretary of the Interior with respect to the maintenance of roadless areas within units of the national park system.

(d)(1) The Secretary of Agriculture and the Secretary of the Interior shall, prior to submitting any recommendations to the President with respect to the suitability of any area for preservation as wilderness—

(A) give such public notice of the proposed action as they deem appropriate, including publication in the Federal Register and in a newspaper having general circulation in the area or areas in the vicinity of the affected land;

(B). Hold a public hearing or hearings at a location or locations convenient to the area affected. The hearings shall be announced through such means as the respective Secretaries involved deem appropriate, including notices in the Federal Register and in newspapers of general circulation in the area: *Provided*, That if the lands involved are located in more than one State, at least one hearing shall be held in each State in which a portion of the land lies;

(C) at least thirty days before the date of a hearing advise the Governor of each State and the governing board of each county, or in Alaska the borough, in which the lands are located, and Federal departments and agencies concerned, and invite such officials and Federal agencies to submit their views on the proposed action at the hearing or by no later than thirty days following the date of the hearing.

(2) Any views submitted to the appropriate Secretary under the provisions of (1) of this subsection with respect to any area shall be included with any recommendations to the President and to Congress with respect to such area.

(e) Any modification or adjustment of boundaries of any wilderness area shall be recommended by the appropriate Secretary after public notice of such proposal and public hearing or hearings as provided in subsection (d) of this section. The proposed modification or adjustment shall then be recommended with map and description thereof to the President. The President shall advise the United States Senate and the House of Representatives of his recommendations with respect to such modification or adjustment and such recommendations shall become effective only in the same manner as provided for in subsections (b) and (c) of this section. (16 U.S.C. 1132)

Sec. 4. (a) The purposes of this Act are hereby declared to be within and supplemental to the purposes for which national forests and units of the national park and national wildlife refuge systems are established and administered and—

(1) Nothing in this Act shall be deemed to be in interference with the purpose for which national forests are established as set forth in the Act of June 4, 1897 (30 Stat. 11), and the Multiple-Use Sustained-Yield Act of June 12, 1960 (74 Stat. 215).

(2) Nothing in this Act shall modify the restrictions and provisions of the Shipstead-Nolan Act (Public Law 539, Seventy-first Congress, July 10, 1930; 46 Stat. 1020), the Thye-Blatnick Act (Public Law 733, Eightieth Congress, June 22, 1948; 62 Stat. 568), and the Humphrey-Thye-Blatnik-Andresen Act (Public Law 607, Eighty-fourth Congress, June 22, 1956; 70 Stat. 326), as applying to the Superior National Forest or the regulations of the secretary of Agriculture.

(3) Nothing in this Act shall modify the statutory authority under which units of the national park system are created. Further, the designation of any area of any park, monument, or other unit of the national park system as a wilderness area pursuant to this Act shall in no manner lower the standards evolved for the use and preservation of such park, monument, or other unit of the national park system in accordance with the Act of August 25, 1916, the statutory authority under which the area was created, or any other Act of Congress which might pertain to or affect such area, including, but not limited to, the Act of June 8, 1906 (34 Stat. 225; 16 U.S.C. 432 et seq.); section 3(2) of the Federal Power Act (16 U.S.C. 796(2)); and the Act of August 21, 1935 (49 Stat. 666; 16 U.S.C. 461 et seq.).

(b) Except as otherwise provided in this Act, each agency administering any area designated as wilderness shall be responsible for preserving the wilderness character of the area and shall so administer such area for such other purposes for which it may have been established as also to preserve its wilderness character. Except as otherwise provided in this Act, wilderness areas shall be devoted to the public purposes of recreational, scenic, scientific, educational, conservation, and historical use.

(c) Except as specifically provided for in this Act, and subject to existing private rights, there shall be no commercial enterprise and no permanent road within any wilderness area designated by this Act and, except as necessary to meet minimum requirements for the administration of the area for the purpose of this Act (including measures required in emergencies involving the health and safety of persons within the area), there shall be no temporary road, no use of motor vehicles, motorized equipment or motorboats, no landing of aircraft, no other form of mechancial transport, and no structure or installation within any such area.

(d) The following special provisions are hereby made:.

(1) Within wilderness areas designated by this Act the use of aircraft or motorboats, where these uses have already become established, may be permitted to continue subject to such

restrictions as the Secretary of Agriculture deems desirable. In addition, such measures may be taken as may be necessary in the control of fire, insects, and diseases, subject to such conditions as the Secretary deems desirable.

(2) Nothing in this Act shall prevent within national forest wilderness areas any activity, including prospecting, for the purpose of gathering information about mineral or other resources, if such activity is carried on in a manner compatible with the preservation of the wilderness environment. Furthermore, in accordance with such program as the Secretary of the Interior shall develop and conduct in consultation with the Secretary of Agriculture, such areas shall be surveyed on a planned, recurring basis consistent with the concept of wilderness preservation by the Geological Survey and the Bureau of Mines to determine the mineral values, if any, that may be present; and the results of such surveys shall be made available to the public and submitted to the President and Congress.

(3) Notwithstanding any other provisions of this Act, until midnight December 31, 1983, the United States mining laws and all laws pertaining to mineral leasing shall, to the same extent as applicable prior to the effective date of this Act, extend to those national forest lands designated by this Act as "wilderness area"; subject, however, to such reasonable regulations governing ingress and egress as may be prescribed by the Secretary of Agriculture consistent with the use of the land for mineral location and development and exploration, drilling, and production, and use of land for transmission lines, waterlines, telephone lines, or facilities necessary in exploring, drilling, producing, mining, and processing operations, including where essential the use of mechanized ground or air equipment and restoration as near as practicable of the surface of the land disturbed in performing prospecting, location, and in oil and gas leasing, discovery work, exploration, drilling, and production, as soon as they have served their purpose. Mining locations lying within the boundaries of said wilderness areas shall be held and used solely for mining or processing operations and uses reasonably incident thereto; and hereafter, subject to valid existing rights, all patents issued under the mining laws of the United States affecting national forest lands designated by this Act as wilderness areas shall convey title to the mineral deposits within the claim, together with the right to cut and use so much of the mature timber therefrom as may be needed in the extraction, removal, and beneficiation of the mineral deposits, if needed timber is not otherwise reasonably available, and if the timber is not otherwise reasonably available, and if the timber is cut under sound principles of forest management as defined by the national forest rules and regulations, but each such patent shall reserve to the United States all title in or to the surface of the lands and products thereof, and no use of the surface of the claim or the resources therefrom not reasonably required for carrying on mining or prospecting shall be allowed except as otherwise expressly provided in this Act: *Provided*, That unless hereafter specficially authorized, no patent within wilderness areas designated by this Act shall issue after December 31, 1983, except for the valid claims existing on or before December 31, 1983. Mining claims located after the effective date of this Act within the boundaries of wilderness areas designated by this Act shall create no rights in excess of those rights which may be patented under the provisions of this subsection. Mineral leases, permits, and licenses covering lands

within national forest wilderness areas designated by this Act shall contain such reasonable stipulations as may be prescribed by the Secretary of Agriculture for the protection of the wilderness character of the land consistent with the use of the land for the purposes for which they are leased, permitted, or licensed. Subject to valid rights then existing, effective January 1, 1984, the minerals in lands designated by this Act as wilderness areas are withdrawn from all forms of appropriation under the mining laws and from disposition under all laws pertaining to mineral leasing and all amendments thereto.

(4) Within wilderness areas in the national forests designated by this Act, (1) the President may, within a specific area and in accordance with such regulations as he may deem desirable, authorize prospecting for water resources, the establishment and maintenance of reservoirs, water-conservation works, power projects, transmission lines, and other facilities needed in the public interest, including the road construction and maintenance essential to development and use thereof, upon his determination that such use or uses in the specific area will better serve the interests of the United States and the people thereof than will its denial; and (2) the grazing of livestock, where established prior to the effective date of this Act, shall be permitted to continue subject to such reasonable regulations as are deemed necessary by the Secretary of Agriculture.

(5) Other provisions of this Act to the contrary notwithstanding, the management of the Boundary Waters Canoe Area, formerly designated as the Superior, Little Indian Sioux, and Caribou Roadless Areas, in the Superior National Forest, Minnesota, shall be in accordance with regulations established by the Secretary of Agriculture in accordance with the general purpose of maintaining, without unnecessary restrictions on other uses, including that of timber, the primitive character of the area, particularly in the vicinity of lakes, streams, and portages: *Provided*, That nothing in this Act shall preclude the continuance within the area of any already established use of motorboats.

(6) Commercial services may be performed within the wilderness areas designated by this Act to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the areas.

(7) Nothing in this Act shall constitute an express or implied claim or denial on the part of the Federal Government as to exemption from State water laws.

(8) Nothing in this Act shall be construed as affecting the jurisdiction or responsibilities of the several States with respect to wildlife and fish in the national forests. (16 U.S.C. 1133)

Sec. 5. (a) In any case where State-owned or privately owned land is completely surrounded by national forest lands within areas designated by this Act as wilderness, such State or private owner shall be given such rights as may be necessary to assure adequate access to such State-owned or privately owned land by such State or private owner and their successors in interest, or the State-owned land or privately owned land shall be exchanged for federally owned land in the same State of approximately equal value under authorities available to the Secretary of Agriculture: *Provided, however*, That the United States shall not transfer to a State or private owner any mineral interests unless the State or private owner relinquishes or causes to be relinquished to the United States the mineral interest in the mineral interest in the surrounded land.

(b) In any case where valid mining claims or other valid occupancies are wholly within a designated national forest wilderness area, the Secretary of Agriculture shall, by reasonable regulations consistent with the preservation of the area of wilderness, permit ingress and egress to such surrounded areas by means which have been or are being customarily enjoyed with respect to other such areas similarly situated.

(c) Subject to the appropriation of funds by Congress, the Secretary of Agriculture is authorized to acquire privately owned land within the perimeter of any area designated by this Act as wilderness if (1) the owner concurs in such acquisition or (2) the acquisition is specifically authorized by Congress. (16 U.S.C. 1134)

Sec. 6. (a) The Secretary of Agriculture may accept gifts or bequests of land within wilderness areas designated by this Act for preservation as wilderness. The Secretary of Agriculture may also accept gifts or bequests of land adjacent to wilderness areas designated by this Act for preservation as wilderness if he has given sixty days advance notice thereof to the President of the Senate and the Speaker of the House of Representatives. Land accepted by the Secretary of Agriculture under this section shall become part of the wilderness area involved. Regulations with regard to any such land may be in accordance with such agreements, consistent with the policy of this Act, as are made at the time of such gift, or such conditions, consistent with such policy, as may be included in, and accepted with, such bequest.

(b) The Secretary of Agriculture or the Secretary of the Interior is authorized to accept private contributions and gifts to be used to further the purposes of this Act. (16 U.S.C. 1135)

Sec. 7. At the opening of each session of Congress, the Secretaries of Agriculture and Interior shall jointly report to the President for transmission to Congress on the status of the wilderness system, including a list and descriptions of the areas in the system, regulations in effect, and other pertinent information, together with any recommendations they may care to make. (16 U.S.C. 1136)

ENDANGERED AMERICAN WILDERNESS ACT OF 1978

An Act

Feb. 24, 1978
[H.R. 3454]

To designate certain endangered public lands for preservation as wilderness, and for other purposes.

Endangered American Wilderness Act of 1978.
16 USC 1132 note.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Endangered American Wilderness Act of 1978".

16 USC 1132 note.

STATEMENT OF FINDINGS AND POLICY

SECTION 1. (a) The Congress finds that—

(1) many areas of undeveloped national forest land possess and exhibit outstanding natural characteristics giving them high value as wilderness and will, if properly preserved, contribute as an enduring resource of wilderness for the benefit of the American people;

16 USC 1131.

(2) certain of these undeveloped national forest lands meet all statutory criteria for suitability as wilderness as established by subsection 2(c) of the Wilderness Act (78 Stat. 890), but are not adequately protected and lack statutory designation pursuant to the Wilderness Act as units of the National Wilderness Preservation System;

(3) these and other undeveloped national forest lands exhibiting wilderness values are immediately threatened by pressures of a growing and more mobile population, large-scale industrial and economic growth, and development and uses inconsistent with the protection, maintenance, restoration, and enhancement of their wilderness character; and

(4) among such immediately threatened areas are lands not being adequately protected or fully studied for wilderness suitability by the agency responsible for their administration.

(b) Therefore, the Congress finds and declares that it is in the national interest that certain of these endangered areas be promptly designated as wilderness within the National Wilderness Preservation System, in order to preserve such areas as an enduring resource of wilderness which shall be managed to promote and perpetuate the wilderness character of the land and its specific multiple values for watershed preservation, wildlife habitat protection, scenic and historic preservation, scientific research and educational use, primitive recreation, solitude, physical and mental challenge, and inspiration for the benefit of all of the American people of present and future generations.

DESIGNATION OF WILDERNESS AREAS

16 USC 1132 note.
16 USC 1131 note.

SEC. 2. In furtherance of the purposes of the Wilderness Act, the following lands (hereinafter referred to as "wilderness areas"), as generally depicted on maps appropriately referenced, dated January 1978, are hereby designated as wilderness and, therefore, as components of the National Wilderness Preservation System—

Pusch Ridge Wilderness, Ariz.

(a) certain lands in the Coronado National Forest, Arizona, which comprise about fifty-six thousand four hundred and thirty acres, are generally depicted on a map entitled "Pusch Ridge Wilderness Area—Proposed", and shall be known as the Pusch Ridge Wilderness;

Golden Trout Wilderness, Calif.

(b) certain lands in the Inyo and Sequoia National Forests, California, which comprise about three hundred and six thousand acres, are generally depicted on a map entitled "Golden Trout Wilderness Area—Proposed", and shall be known as the Golden Trout Wilderness;

Santa Lucia Wilderness, Calif.

Notice.
Publication in Federal Register.

16 USC 1134.

(c) certain lands in and adjacent to the Los Padres National Forest, California, which comprise about twenty-one thousand two hundred and fifty acres, are generally depicted on a map entitled "Santa Lucia Wilderness Area—Proposed", and shall be known as the Santa Lucia Wilderness: *Provided*, That the tract identified on said map as "Wilderness Reserve" is designated as wilderness, subject only to the removal of the existing and temporary nonconforming improvement, at which time the Secretary of Agriculture (hereinafter referred to as the "Secretary") is directed to publish notice thereof in the Federal Register. Pending such notice, and subject only to the maintenance of the existing nonconforming improvement, said tract shall be managed as wilderness in accordance with section 5 of this Act. In order to guarantee the continued viability of the Santa Lucia watershed and to insure the continued health and safety of the communities serviced by such watershed, the management plan for the Santa Lucia area to be prepared following designation as wilderness shall authorize the Forest Service to take whatever appropriate actions are necessary for fire prevention and watershed protection including, but not limited to, acceptable fire presuppression and fire suppression measures and techniques. Any special provisions contained in the management plan for the Santa Lucia Wilderness area shall be incorporated in the planning for the Los Padres National Forest: *Provided*, That the Forest Service is authorized to continue fire presuppression, fire suppression measures and techniques, and watershed maintenance pending completion of the management plan for the Santa Lucia area;

Ventana Wilderness, Calif.

16 USC 1132 note.

(d) certain lands in the Los Padres National Forest, California, which comprise about sixty-one thousand acres, are generally depicted on a map entitled "Ventana Wilderness Additions—Proposed", and which are hereby incorporated in, and shall be deemed to be a part of, the Ventana Wilderness as designated by Public Law 91-58. In order to guarantee the continued viability of the Ventana watershed and to insure the continued health and safety of the communities serviced by such watershed, the management plan for the Ventana area to be prepared following designation as wilderness shall authorize the Forest Service to take whatever appropriate actions are necessary for fire prevention and watershed protection including, but not limited to, acceptable fire presuppression and fire suppression measures and techniques. Any special provisions contained in the management plan for the Ventana Wilderness area shall be incorporated in the planning for the Los Padres National Forest;

Hunter-Fryingpan Wilderness, Colo.

Spruce Creek Addition.

(e) certain lands in the White River National Forest, Colorado, which comprise approximately seventy-four thousand four hundred and fifty acres, are generally depicted as area "A" on a map entitled "Hunter-Fryingpan Wilderness Area—Proposed", and shall be known as the Hunter-Fryingpan Wilderness. The area commonly known as the "Spruce Creek Addition", depicted as area "B" on said map and comprising approximately eight thou-

16 USC 1132.
Review.
Report to President.
Recommendation, submittal to Congress.

sand acres, shall, in accordance with the provisions of subsection 3(d) of the Wilderness Act, be reviewed by the Secretary as to its suitability or nonsuitability for preservation as wilderness. The Secretary shall complete his review and report his findings to the President and the President shall submit to the United States Senate and the House of Representatives his recommendation with respect to the designation of the Spruce Creek area as wilderness not later than two years from the date of enactment of this Act. Subject to valid existing rights, the wilderness study area designated by this subsection shall, until Congress determines otherwise, be administered by the Secretary so as to maintain presently existing wilderness character and potential for inclusion in the National Wilderness Preservation System. No right, or claim of right, to the diversion and use of the waters of Hunter Creek. the Fryingpan or Roaring Fork Rivers, or any tributaries of said creeks or rivers, by the Fryingpan-Arkansas Project, Public Law 87-590, Eighty-seventh Congress, and the reauthorization thereof by Public Law 93-493, Ninety-third Congress, under the laws of the State of Colorado, shall be prejudiced, expanded, diminished, altered, or affected by this Act. Nothing in this Act shall be construed to expand, abate, impair, impede, or interfere with the construction, maintenance, or repair of said Fryingpan-Arkansas Project facilities, nor the operation thereof, pursuant to the Operating Principles, House Document Numbered 130, Eighty-seventh Congress, and pursuant to the water laws of the State of Colorado;

43 USC 616.
43 USC 600f.

Manzano Mountain Wilderness, N. Mex.

(f) certain lands in the Cibola National Forest, New Mexico, which comprise about thirty-seven thousand acres, are generally depicted on a map entitled "Manzano Mountain Wilderness Area—Proposed", and shall be known as the Manzano Mountain Wilderness;

Sandia Mountain Wilderness, N. Mex.

(g) certain lands in Cibola National Forest, New Mexico, which comprise about thirty thousand nine hundred and thirty acres, are generally depicted on a map entitled "Sandia Mountain Wilderness Area (North and South Units)—Proposed", and shall be known as the Sandia Mountain Wilderness;

Chama River Canyon Wilderness, N. Mex.

(h) certain lands in the Santa Fe and Carson National Forests, New Mexico, which comprise approximately fifty thousand three hundred acres, are generally depicted on a map entitled "Chama River Canyon Wilderness Area—Proposed", and shall be known as the Chama River Canyon Wilderness;

Lone Peak Wilderness, Utah.

(i) certain lands in Wasatch and Unita National Forests, Utah, which comprise about twenty-nine thousand five hundred and sixty-seven acres, are generally depicted on a map entitled "Lone Peak Wilderness Area—Proposed", and shall be known as the Lone Peak Wilderness: *Provided*, That the Forest Service is directed to utilize whatever sanitary facilities are necessary (including but not limited to vault toilets, which may require service by helicopter) to insure the continued health and safety of the communities serviced by the Lone Peak watershed; furthermore, nothing in this Act shall be construed to limit motorized access and road maintenance by local municipalities for those minimum maintenance activities necessary to guarantee the continued viability of whatsoever watershed facilities currently exist, or which may be necessary in the future to prevent the degradation of the water supply in the Lone Peak area;

Savage Run Wilderness, Wyo.

(j) certain lands in the Medicine Bow National Forest, Wyoming, which comprise about fourteen thousand nine hundred and forty acres, are generally depicted on a map entitled "Savage Run Wilderness Area—Proposed", and shall be known as the Savage Run Wilderness; and

(k) certain lands in Lolo National Forest, Montana, which comprise approximately twenty-eight thousand four hundred and forty acres are generally depicted on a map entitled "Welcome Creek Wilderness Area—Proposed", and shall be known as the Welcome Creek Wilderness.

Welcome Creek Wilderness, Mont.

OREGON OMNIBUS WILDERNESS ACT OF 1978

16 USC 1132 note.
16 USC 1131 note.

SEC. 3. In furtherance of the purposes of the Wilderness Act, the following lands (hereinafter referred to as "wilderness areas") as generally depicted on maps appropriately referenced, dated January 1978, are hereby designated as wilderness and, therefore, as components of the National Wilderness Preservation System—

Kalmiopsis Wilderness, Oreg.

(a) certain lands in the Siskiyou National Forest, Oregon, which comprise about ninety-two thousand acres, are generally depicted on a map entitled "Kalmiopsis Wilderness Additions—Proposed", and which are hereby incorporated in and shall be deemed to be a part of the Kalmiopsis Wilderness as designated by Public Law 88-577;

16 USC 1131 note.
Wild Rogue Wilderness, Oreg.

(b) certain lands in the Siskiyou National Forest, Oregon, which comprise about thirty-six thousand seven hundred acres, are generally depicted on a map entitled "Wild Rogue Wilderness—Proposed", and shall be known as the Wild Rogue Wilderness: *Provided*, That the portion of the segment of the Rogue River designated as a component of the National Wild and Scenic Rivers System by section 3(a)(5) of the Wild and Scenic River Act (82 Stat. 906, as amended) which lies within the Wild Rogue Wilderness shall be managed as a wild river notwithstanding section 10(b) of that Act or any provisions of the Wilderness Act to the contrary;

16 USC 1274.
16 USC 1281.

Wenaha-Tucannon Wilderness, Oreg.

(c) certain lands in the Umatilla National Forest, Oregon and Washington, which comprise about one hundred and eighty thousand acres, are generally depicted on a map entitled "Wenaha-Tucannon Wilderness—Proposed", and shall be known as the Wenaha-Tucannon Wilderness;

Mount Hood Wilderness, Oreg.

(d) certain lands in the Mount Hood National Forest, Oregon, which comprise about thirty-three thousand acres, are generally depicted on a map entitled "Mount Hood (Zig Zag) Proposed Wilderness Additions", and which are hereby incorporated in, and shall be deemed to be a part of the Mount Hood Wilderness as designated by Public Law 88-577; and

(e) certain lands in the Willamette National Forest, Oregon, which comprise about forty-five thousand four hundred acres, are generally depicted on a map entitled "French Pete Creek and Other Proposed Additions, Three Sisters Wilderness", and which are hereby incorporated in, and shall be deemed to be a part of, the Three Sisters Wilderness as designated by Public Law 88-577.

16 USC 1131 note.

GOSPEL-HUMP AREA

16 USC 1132 note.

SEC. 4. (a)(1) In furtherance of the purposes of the Wilderness Act, certain lands in the Nezperce National Forest, Idaho, which comprise about two hundred and six thousand acres, as generally depicted under the category "Wilderness" on a map entitled "Gospel-Hump Planning Unit" and dated January 1978, are hereby designated as wilderness and therefore, as components of the National Wilderness Preservation System.

(2) Certain other contiguous roadless lands which comprise about ninety-two thousand acres, as generally depicted on said map as "Management Areas" shall be managed in accordance with the multipurpose resource development plan required by this section.

(3) Certain other contiguous roadless lands which comprise about forty-five thousand acres, as generally depicted on said map as "Development Areas" shall be immediately available for resource utilization under the existing applicable Forest Service land management plans.

Advisory Committee. Establishment.

(b)(1) Within ninety days after enactment of this Act, the Secretary shall appoint a seven-member Advisory Committee (hereinafter referred to as the "Committee") on the management of the Gospel-Hump Area who shall advise the Secretary as to the progress of the fish and game research program, and the multipurpose resource development plan required by this section, and who shall evaluate the results of the research program and development plan on an ongoing basis.

Members.

(2) The Committee shall be comprised of two members of the timber industry who purchase timber from the Nezperce National Forest, two members from organizations who are actively engaged in seeking the preservation of wilderness lands, and three members from the general public who otherwise have a significant interest in the resources and management of the Gospel-Hump Area.

Travel expenses.

(3) Committee members shall serve without pay except that while away from their homes or regular places of business in performance of services for the Committee, members of the Committee shall be allowed travel expenses, including per diem in lieu of subsistence, in the same manner as persons employed intermittently in the Government service are allowed under section 5703(b) of title 5 of the United States Code.

(4) The Secretary shall provide that the Committee shall meet as soon as practicable after all the members are appointed, but in no case later than one hundred and fifty days after the enactment of this Act. Subsequently, the Committee shall meet every one hundred and eighty days, or as often as the Secretary deems necessary.

Termination.

(5) The Committee shall terminate one hundred and fifty days after transmittal of the completed multipurpose resource development plan required under this section.

Fish and game research program.

(c)(1) The Secretary shall cooperate with agencies and institutions of the State of Idaho, and with the Secretary of the Interior, in conducting a comprehensive fish and game research program within the Gospel-Hump Area and surrounding Federal lands in north-central Idaho. The Secretary shall assure that this research program includes detailed investigations concerning resident and anadromous fisheries resources (including water quality relationships) and the status, distribution, movements, and management of game populations, in order to provide findings and recommendations concerning integration of land management and development with the protection and enhancement of these fish and game resources.

Grants.

(2) To carry out the comprehensive fish and game research program, the Secretary is authorized to make grants of funds to agencies and institutions of the State of Idaho and to provide the assistance of personnel from agencies under his jurisdiction.

(3) The Secretary shall assure that the comprehensive fish and game research program is scheduled and progressing on a timely basis so that findings and recommendations are fully integrated in preparation of the multipurpose resource development plan required by this section.

Multipurpose research development plan.

(d) (1) Within four years after enactment of this Act, the Secretary shall implement a multipurpose resource development plan for development of the Federal lands identified on the map referenced in this section as "Management Areas".

(2) The multipurpose resource development plan shall comply with the provisions of the Multiple-Use Sustained-Yield Act of 1960 (74 Stat. 215; 16 U.S.C. 528) and the Forest and Rangeland Renewable Resources Planning Act of 1974 (88 Stat. 476; 16 U.S.C. 1601) as amended, and shall conform in all respects to the provisions of the National Forest Management Act of 1976 (90 Stat. 2949; 16 U.S.C. 1600), including the regulations, guidelines, and standards promulgated pursuant to those Acts. In preparing the multipurpose resource development plan, the Secretary shall take particular care to gather and integrate detailed field data on soil types and soil hazards, and to consider timber volumes, timber site classes, and productivity. The current findings and recommendations of the comprehensive fish and game research program and other available information shall be integrated into the preparation of the multipurpose resource development plan. The multipurpose resource development plan may be periodically revised to accommodate new information as it becomes available.

(3) In preparing the multipurpose resource development plan, the Secretary shall assure adequate public involvement, and he shall make full use of the recommendations of the Committee established by this section.

(4) One year after the date of enactment of this Act and every year thereafter, the Secretary shall review the multipurpose resource development plan being prepared in accordance with this section to determine which lands, if any, might be scheduled for development prior to the completion of the final multipurpose resource development plan.

Completion notice.
Publication in Federal Register.
Transmittal to President and Congress.

(5) The Secretary shall publish a notice of the completion of the multipurpose resource development plan or a portion thereof in the Federal Register and shall transmit it to the President and to the Senate and House of Representatives. The completed multipurpose resource development plan or relevant portions thereof shall be implemented by the Secretary no earlier than ninety days and no later than one hundred and fifty calendar days from the date of such transmittal.

Wilderness management plan.

(e) The Secretary shall prepare a wilderness management plan for the Gospel-Hump Wilderness designated pursuant to this section, taking into account the findings of the comprehensive fish and game research program.

(f) Within thirty days after the date of enactment of this Act, the Secretary shall include the timber resources on the lands identified on the map referenced in this section as "Development Areas" and "Management Areas" within the annual allowable timber harvest level for the Nezperce National Forest.

Mineral value survey, availability to public.
Submittal to President and Congress.

(g) Nothing in this Act shall prevent within the Gospel-Hump Wilderness Area any activity, including prospecting, for the purpose of gathering information about mineral or other resources, if such activity is carried on in a manner compatible with the preservation of the wilderness environment. Furthermore, in accordance with such program as the Secretary of the Interior shall develop and conduct in consultation with the Secretary, the Gospel-Hump Wilderness Area shall be surveyed on a planned recurring basis consistent with the concept of wilderness preservation by the Geological Survey and the Bureau of Mines to determine the mineral values, if any, that may be present, and the results of such surveys shall be made available to the public and submitted to the President and the Congress.

Appropriation authorization.

(h) There are hereby authorized to be appropriated after October 1, 1978, such funds as may be necessary to carry out the comprehensive fish and game research program and the multipurpose resource development plan authorized under this section. Appropriations requests by the President to implement the multipurpose resource development plan shall express in qualitative and quantitative terms the most rapid and judicious manner and methods to achieve the purposes of this Act. Amounts appropriated to carry out this Act shall be expended in accordance with the Budget Reform and Impoundment Control Act of 1974 (88 Stat. 297).

31 USC 1301 note.

ADMINISTRATION OF WILDERNESS AREAS

16 USC 1131 note.
Effective date.

16 USC 1133.

SEC. 5. Subject to valid existing rights, each wilderness area designated by this Act shall be administered by the Secretary in accordance with the provisions of the Wilderness Act: *Provided*, That any reference in such provisions to the effective date of the Wilderness Act shall be deemed to be a reference to the effective date of this Act: *Provided further*, That with respect to the Gospel-Hump Wilderness Area designated by section 4(a)(1) of this Act, all references under section 4(d)(3) of the Wilderness Act of 1964 to December 31, 1983, shall be deemed to be December 31, 1988, and any reference to January 1, 1984, shall be deemed to be January 1, 1989: *Provided, however*, That all activities resulting from the exercise of valid existing mineral rights on patented or unpatented mining claims within the Gospel-Hump Wilderness Area shall be subject to regulations prescribed by the Secretary as he deems necessary or desirable for the preservation and management of this area.

FILING OF MAPS AND DESCRIPTIONS

SEC. 6. As soon as practicable after enactment of this Act, a map and a legal description of each wilderness area shall be filed with the Committee on Energy and Natural Resources of the United States Senate and the Committee on Interior and Insular Affairs of the House of Representatives, and each such map and description shall have the same force and effect as if included in this Act: *Provided*, That correction of clerical and typographical errors in each such legal description and map may be made. Each such map and legal description shall be on file and available for public inspection in the Office of the Chief of the Forest Service, Department of Agriculture.

Approved February 24, 1978.

LEGISLATIVE HISTORY:

HOUSE REPORTS: No. 95-540 (Comm. on Interior and Insular Affairs) and No. 95-861 (Comm. of Conference).
SENATE REPORTS: No. 95-490 (Comm. on Energy and Natural Resources), and No. 95-626 (Comm. of Conference).
CONGRESSIONAL RECORD:
Vol. 123 (1977): Sept. 12, considered and passed House.
Oct. 20, considered and passed Senate, amended.
Vol. 124 (1977): Feb. 8, Senate agreed to conference report.
Feb. 9, House agreed to conference report.
WEEKLY COMPILATION OF PRESIDENTIAL DOCUMENTS:
Vol. 14, No. 8 (1978): Feb. 24, Presidential statement.

FIRE MANAGEMENT SUPPRESSION GUIDE

AREAS 1 & 2

CORONADO NATIONAL FOREST

SUMMARY

In November 1976, a General Management Review of the Coronado National Forest, Region 3, directed that the Forest develop fire suppression proposals for lower resource damage areas. In May of 1977, a Washington Office Management Review resulted in further support for the development of a revised fire management plan for the Coronado National Forest.

Early in 1978, the Regional Forester directed that the Coronado National Forest would serve as a pilot Forest for the implementation of the revised fire policy (FSM 5100 - Fire Management, Amendment Number 56, dated February 1978).

"5103 - Policy - The basic fire management policy on National Forest System lands is to provide well-planned and executed fire protection and fire use programs that are cost effective and responsive to land and resource management goals and objectives and supportive of RPA outputs."

5130.3 - Policy - Fire suppression will be fast, energetic, thorough, and conducted with a high degree of regard for personal safety."

A summary of the guide, which has resulted from 18 months of planning and research on the part of five District Rangers and their staffs, plus the Forest Supervisor and his staff follows:

The Forest was divided into two fire suppression areas on the basis of elevation, fuels, summer homes and other physical improvements, and projected and historical net effect of wildfire upon the resource. Objectives for the entire Forest were developed.

The projected effect of this suppression guide will be a decided reduction in suppression expenditures, with no significant degradation of the resource while protecting life, property, and confining all fires to National Forest land.

OBJECTIVES

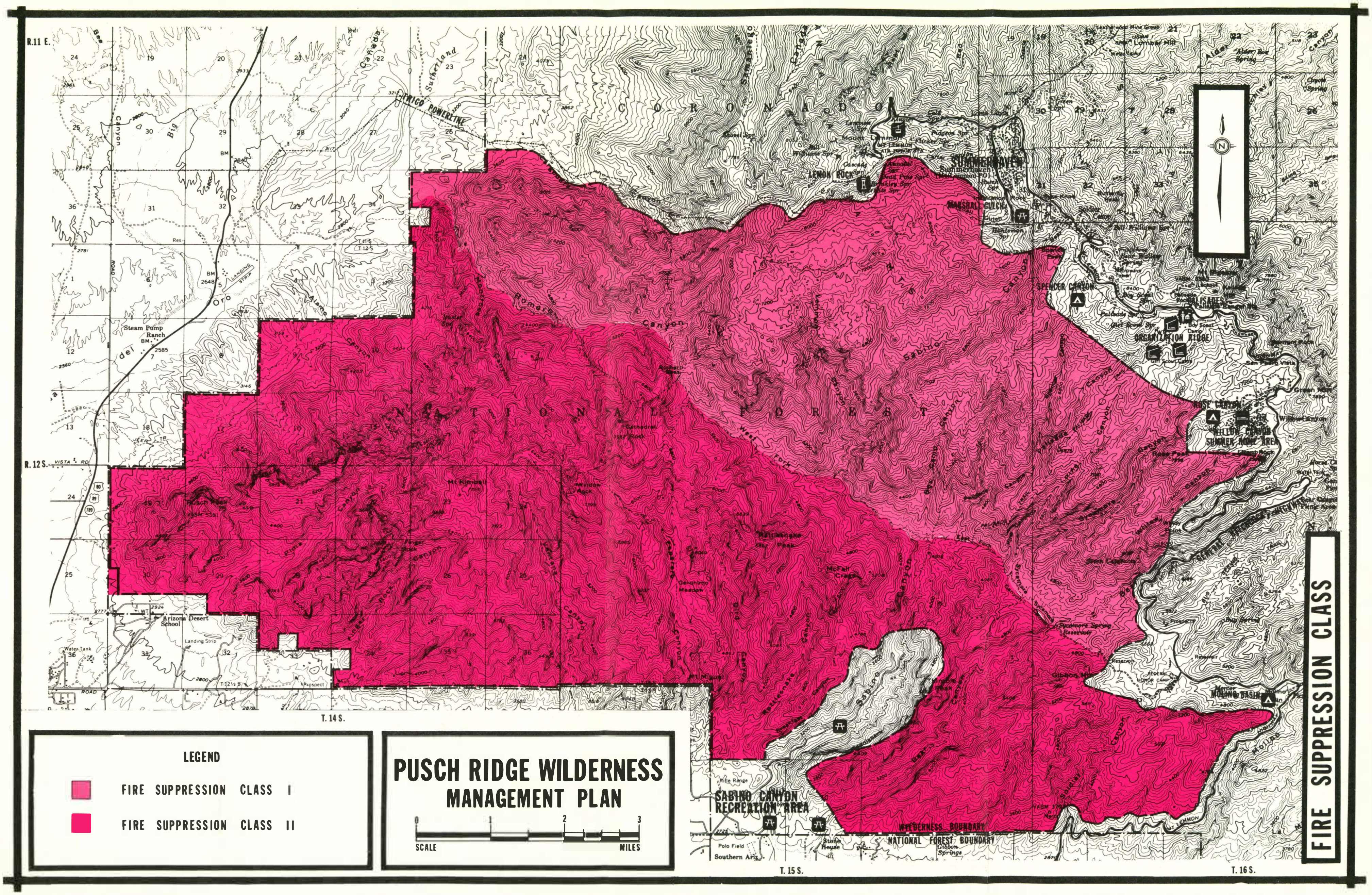
1. Protect life and property. Confine all fires to National Forest land, except where signed agreements which allow fires to cross boundaries under prescription are in effect.
2. Maintain water, air and soil quality at an acceptable level.
3. Enhance the diversity and perpetuation of desirable vegetative species, while providing habitats which are compatible with the needs of wildlife.
4. Maximize the use of prescribed fire in attaining the preceding objectives.
5. Recognize and manage fire as a natural part of the environment.

Referring to the Forest Map of Fire Suppression Areas 1 & 2, the following matrix is furnished as a guide to suppression action. District dispatching plans will prevail and District Rangers, or their designated representatives, may adjust this guide based on actual fire activity:

FIRE SUPPRESSION ACTION GUIDE

Fire Danger	AREA 1	AREA 2
Very High and Extreme	Maximum available forces including air tankers and helicopters	Ground forces hand tools
High Moderate Low	Ground forces Hand tools	Minimum ground forces Hand tools

In calculating forces and suppression actions, consideration will be given to fires burning on the Coronado National Forest, in Region 3, and in the western United States. Preattack planning will be used where available.


R.11 E.
R. 12 S.
T. 14 S.
T. 15 S.
T. 16 S.
C O R O N A D O
N A T I O N A L
F O R E S T
TRICO POWERLINE
Big
Canyon
Cañada del Oro
Steam Pump Ranch
Arizona Desert School
Landing Strip
Romero
Canyon
Sabino
Cathedral Rock
Mt Kimball
Window Rock
Rattlesnake Peak
McFall Crags
Geronimo Meadow
SUMMERHAVEN
LEMON ROCK
MARSHALL GULCH
SPENCER CANYON
PALISADES
ORGANIZATION RIDGE
ROSE CANYON
WILLOW CANYON SUMMER HOME AREA
MOLINO BASIN
SABINO CANYON RECREATION AREA
WILDERNESS BOUNDARY
NATIONAL FOREST BOUNDARY
Rifle Range
Polo Field
Southern Ariz.
Sabino

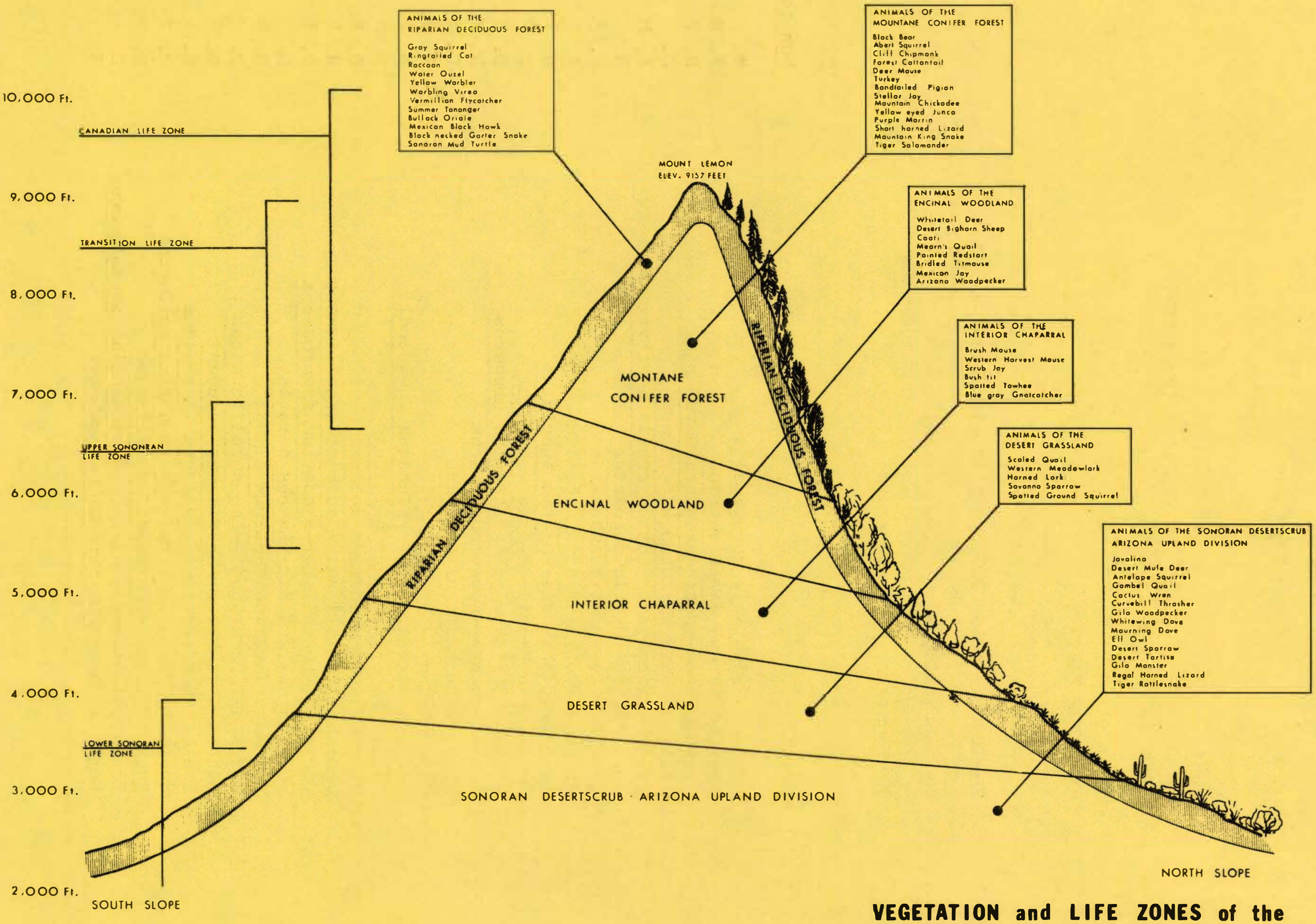
LEGEND

🟥	FIRE SUPPRESSION CLASS I
🟥	FIRE SUPPRESSION CLASS II

PUSCH RIDGE WILDERNESS
MANAGEMENT PLAN

SCALE 0 1 2 3 MILES

FIRE SUPPRESSION CLASS


ANIMALS OF THE RIPARIAN DECIDUOUS FOREST
Gray Squirrel
Ringtailed Cat
Raccoon
Water Ouzel
Yellow Warbler
Warbling Vireo
Vermillion Flycatcher
Summer Tanager
Bullock Oriole
Mexican Black Hawk
Black necked Garter Snake
Sonoran Mud Turtle
ANIMALS OF THE MOUNTANE CONIFER FOREST
Black Bear
Abert Squirrel
Cliff Chipmank
Forest Cottontail
Deer Mouse
Turkey
Bandtailed Pigion
Stellar Jay
Mountain Chickadee
Yellow eyed Junco
Purple Martin
Short horned Lizard
Mountain King Snake
Tiger Salamander
ANIMALS OF THE ENCINAL WOODLAND
Whitetail Deer
Desert Bighorn Sheep
Coati
Mearn's Quail
Painted Redstart
Bridled Titmouse
Mexican Jay
Arizona Woodpecker
ANIMALS OF THE INTERIOR CHAPARRAL
Brush Mouse
Western Harvest Mouse
Scrub Jay
Bush tit
Spotted Towhee
Blue gray Gnatcatcher
ANIMALS OF THE DESERT GRASSLAND
Scaled Quail
Western Meadowlark
Horned Lark
Savanna Sparrow
Spotted Ground Squirrel
ANIMALS OF THE SONORAN DESERTSCRUB ARIZONA UPLAND DIVISION
Javalina
Desert Mule Deer
Antelope Squirrel
Gambel Quail
Cactus Wren
Curvebill Thrasher
Gila Woodpecker
Whitewing Dove
Mourning Dove
Elf Owl
Desert Sparrow
Desert Tortise
Gila Monster
Regal Horned Lizard
Tiger Rattlesnake
10,000 Ft.
9,000 Ft.
8,000 Ft.
7,000 Ft.
6,000 Ft.
5,000 Ft.
4,000 Ft.
3,000 Ft.
2,000 Ft.
CANADIAN LIFE ZONE
TRANSITION LIFE ZONE
UPPER SONORAN LIFE ZONE
LOWER SONORAN LIFE ZONE
MOUNT LEMON ELEV. 9157 FEET
RIPARIAN DECIDUOUS FOREST
RIPARIAN DECIDUOUS FOREST
MONTANE CONIFER FOREST
ENCINAL WOODLAND
INTERIOR CHAPARRAL
DESERT GRASSLAND
SONORAN DESERTSCRUB · ARIZONA UPLAND DIVISION
SOUTH SLOPE
NORTH SLOPE

VEGETATION and LIFE ZONES of the SANTA CATALINA MOUNTAINS

Note: Above information prepared by the following individuals.
1. Life zone classifications by Niering and Whittaker.
2. Plant communities by Lowe and Brown.

WILDLIFE INVENTORY

CODE FOR HABITAT

D--Desert, below 3200 feet in elevation.

F--Foothills, above 3200 and below 6500.

M--Mountain, 6500 and above

Mammals	Habitat
Opossum--Didelphis marsupialis	M
Vagrant Shrew--Sorex vagrans	F, M
Desert Shrew--Notiosorex crawfordi	D, F
Leafnose Bat--Macrotus waterhousii	D.
Silver-haired Bat--Lasionycteris noctivigans	F, M
Yuma Myotis--Myotis subulatus	D
Cave Myotis--Myotis subulatus	D, F
Fringed Myotis--Myotis subulatus	D, F
Long-legged Myotis--Myotis subulatus	M
California Myotis--Myotis subulatus	D, F
Western Pipistrel--Pipistrellus hesperus	D, F
Big Brown Bat--Eptesicus fuscus	D, F, M
Hoary Bat--Lasiurus cinereus	D, F, M
Red Bat--Lasiurus borealis	D, F, M
Western Big Eared Bat--Plecatus townsendii	D, F
Pallid Bat--Antroxous pallidus	D, F
Freetail Bat--Tadarida molossa	D, F, M
Mexican Freetail Bat--Tadarida brasiliensis	D, F
Pocketed Freetail Bat--Tadarida femorosacca	D, F
Western Mastiff Bat--Eumops perotis	D
Antelope Jackrabbit--Lepus alleni	D, F
Blacktail Jackrabbit--Lepus californicus	D, F
Desert Cottontail--Sylvilagus auduboni	D, F
Eastern Cottontail--Sylvilagus floridanus	D, F
Spotted Ground Squirrel--Spermophilus spilosoma	D, F
Rock Squirrel--Spermophilus spilosoma	D, F, M
Roundtail Ground Squirrel--Spermophilus tereticaudus	D
Hognose Bat--Chaeranycteris mexicana	D

Mammals	Habitat
Harris Ground Squirrel--Ammospermophilus harrisii	D, F
Cliff Chipmunk--Eutamias dorsalis	F, M
Abert Squirrel--Sciurus aberti	M
Arizona Grey Squirrel--Sciurus arizonensis	F, M
Valley Pockt Gopher--Thomomys bottae	D, F, M
Silky Pocket Gopher--Perognathus flavus	F
Arizona Pocket Mouse--Perognathus amplus	D
Desert Pocket Mouse--Perognathus penicillatus	D
Baily Pocket Mouse--Perognathus baileyi	F
Hispid Pocket Mouse--Perognathus hispidus	F
Rock Pocket Mouse--Perognathus intermedius	D, F
Plains Harvest Mouse--Reithrodontomys montanus	F
Fulvous Harvest Mouse--Reithrodontomys fulvescenes	F
Bannertail Kangaroo Rat--Dipodomys spectabilis	D
Merriam Kangaroo Rat--Dipodomys merriami	D
Ord Kangaroo Rat--Dipodomys ordii	D
Beaver--Castor canadensis	F, M
Southern Grasshopper Mouse--Onychomys torridus	D
Western Harvest Mouse--Reithrodontomys megalotis	D, F
Deer Mouse--Peromyscus maniculatus	D, F, M
Brush Mouse--Peromyscus boylei	F, M
Cactus Mouse--Peromyscus eremicus	D, F
White-footed Mouse--Peromyscus leucopus	D, F
Hispid Cotton Rat--Sigmodon hispidus	D, F
Whitethroat Wood Rat--Neotoma mexicana	D, F
House Mouse--Mus musculus	D, F, M
Porcupines--Erethizon dorsatum	D, F, M
Black Bear--Euarctos americanus	M
Raccoon--Procyon lotor	D, F, M
Coati-mundi--Nasua narica	D, F
Ringtailed Cat--Bassariscus astutus	F, M,
Spotted Skunk--Spilogale putorius	D, F, M
Striped Skunk--Mephitis mephitis	D, F
Hooded Skunk--Mephitis macroura	D, F
Hognosed Skunk--Conepatus leuconotus	D, F, M
Badger--Taxidae taxus	D, F, M
Swift Fox--Vulpes macrotis	D, F
Grey Fox--Urocyon cinereoargenteus	F, M
Coyote--Canis latrans	D, F, M
Mountain Lion--Felis conolor	F, M
Bobcat--Lynx rufus	D, F, M
Javelina--Tayassu tajacu	D, F
Coues Deer--Odocoileus virginianus	F, M
Mule Deer--Odocoileus hemionus	D, F, M
Desert Bighorn Sheep--Ovis canadensis	F, M

Mammals	Habitat
Hypothetical and Extinct Species	
Grizzly Bear--Ursus horribilis	M
Jaguarundi--Felis vagurondi	D, F
Jaguar--Felis onca	D, F
Ocelet--Felis pardalis	D, F
Pronghorn Antelope--Antilocapra americana	F
Merriams Elk--Cervus canadensis	F
Grey Wolf--Canis lupus	F, M
Merriams Mouse--Peromyscus merriami	D
Least Cotton Rat--Sigmodon minimus	D
Reptiles	
Sonoran Mud Turtles--Kinosternon sonoriense	D, F, M
Western Box Turtle--Terrapene ornata	D, F
Desert Tortise--Gopherus agassizi	D, F
Spiny Softshell--Trionyx ferox	D
Western Banded Gecko--Coleonyx variegatus	D, F
Zebra Tailed Lizard--Callisaurus draconoides	D, F
Spotted Whiptail--Cnemidophorus sacki	D, F
Western Whiptail--Cnemidophorus tigris	D, F
Woodland Whiptail--Cnemidophorous velox	D, F
Collard Lizard--Crotaphytus collaris	D, F
Leopard Lizard--Crotaphytus wislizenii	D, F
Lesser Earless Lizard--Holbrookia maculata	D, F
Greater Earless Lizard--Holbrookia texana	D, F
Short-Horned Lizard--Phrynosoma douglassi	F, M
Regal Horned Lizard--Phrynosoma solare	D, F
Clark Spiny Lizard--Sceloporus clarki	D, F, M
Desert Spiny Lizard--Sceloporus magister	D, F
Eastern Fence Lizard--Sceloporus undulatus	F, M
Arizona Alligator Lizard--Gerrhonotus kingi	M
Tree Lizard--Uta ornata	D, F, M
Side Blotched Lizard--Uta stansburiana	D, F
Gila Monster--Holderma suspectum	D, F
Glossy Snake--Arizona elegans	D, F
Banded Sand Snake--Chilomeniscus cinctus	D, F
Western Shovelnose Snake--Chionactis occipitalis	D
Regal Ringneck Snake--Diadopnis regalis	F, M
Night Snake--Hypsiglena torquata	D, F, M
Common Kingsnake--Lampropeltis getulus	D, F
Sonora-Mountain Kingsnake--Lampropeltis pyromelon	D, F
Sonoran Whipsnake--Masticophis bilineatus	D, F

Reptiles	Habitat
Coachwhip--Mastcophis flagellum	D, F
Western Blind Snake--Leptotyphlops humilis	D, F
Saddled Leafnose Snake--Phyllorynchus browni	D, F
Spotted Leafnose Snake--Phyllorynchus decurtatus	D, F
Gopher Snake--Pituophis catenifer	D, F, M
Long Nose Snake--Rehinocheilus lecontei	D, F
Western Patchnose Snake--Saladora hexalepis	D, F
Mountain Patchnose Snake--Salvador grahamiae	M
Western Ground Snake--Sonora semiannulata	D, F
Plains Black-Headed Snake--Tantilla nigriceps	D, F
Sonora Lyre Snake--Trimorphoden lambda	D, F
Black Necked Garter Snake--Thamnophis crytopsis	D, F
Mexican Garter Snake--Thamnophis crytopsis	D
Checkered Garter Snake--Thamnophis marcianua	D, F
Arizona Coral Snake--Micrurus euryxanthus	D, F, M
Western Diamond Backed Rattle Sanke--Crotalus atrox	D, F
Blacktailed Rattle Snake--Crotalus molossus	F, M
Mojave Rattle Snake--Crotalus scutulatus	D, F
Tiger Rattle Snake--Crotalus tigris	F
Amphibians	
Couch Spadefoot--Scaphiopus couchi	D, F
Western Spadefoot--Scaphiopus hammondi	D, F, M
Colorado River Toad--Bufo alvarius	D, F
Great Plains Toad--Bufo cognatus	D
Red-Spotted Toad--Bufo punctatus	D, F
Woodhouse Toad--Bufo woodhousi	D, F, M
Canyon Tree Frog--Hyla arenicolor	F, M
Leopard Frog--Rana pipens	D, F, M
Birds	
Grebes	
Pied-bill Grebe--Podilymbus podiceps	
Cormorants	
Double-crested Cormorant--Phalacrocorax auritus	
Herons	
Great Blue Heron--Ardea herodias	
Green Heron--Buforides viriscens	

Ducks

Mallard--Anas platrhynchos
Green-winged Teal--Anas carolinensis
Blue-winged Teal--Anas discors
Pintail--Anas actva
Widgeon--Mareca americana
Wood Duck--Aix sponsa
Lesser Scaup--Aythya affinis
Bufflehead--Bucephala albeola

Vultures

Turkey Vulture--Cathartes aura
Black Vulture--Coragypus atratus

Hawks and Eagles

Goshawk--Accipiter gentilis
Sharp-shinned Hawk--Accipiter striatus
Cooper's Hawk--Accipiter cooperii
Red-tailed Hawk--Buteo jamaicensis
Zone-tailed Hawk--Buteo albonotatus
Swainson's Hawk--Buteo swainsoni
Ferruginous Hawk--Buteo regalis
Grey Hawk--Buteo nitidus
Harris Hawk--Parabuteo unicintus
Black Haw--Buteogallus anthracinis
Golden Eagle--Aquila chrysaetos
Osprey--Pandion haliaetus

Falcons

Prairie Falcon--Falco sparverius
Pigeon Hawk--Falco columbarius
Sparrow Hawk--Falco mexicanus
Peregrine Falcon--Falco peregrinus

Quail

Gambel's Quail--Lophortyx gambelii
Scale Quail--Callipepla squamata
Mearn's Quail--Cyrtonyx montezumae

Turkeys

Turkey--Meleagris gallopavo

Shorebirds

Virginia Rail--Rallus limicola
Sora--Porzana carolina
Common Gallinule--Gallinula chloropus
American Coot--Fulica americana
Killdeer--Charadrius vaciferus
Common Snipe--Capella gallinago
Spotted Sandpiper--Actitus macularia
Least Sandpiper--Erolia minutilla

Gulls

California gull--Larus californicus

Pigeons and Doves

Band-tailed Pigeon--Columbia fasciata
White-winged Dove--Zenaida asiatica
Morning Dove--Zenaida macroura
Inca Dove--Scarda fella
Common Pigeon--Columbia livia
Ground Dove--Columbigallina passerina

Cucoos

Yellow-billed Cuckoo--Coccyzus americanus
Roadrunner--Geoccyx californicus
Groove-billed Ani--Crotophage sufcirostris

Owls

Barn Owl--Tyto alba
Screech Owl--Otus asio
Great Horned Owl--Bobo virginianus
Pygmy Owl--Glaucidium gnoma
Ferruginous Owl--Galucidium brasilianum
Elf Owl--Micrathene whitneyi
Flammulated Owl--Otus flammeolus
Wiskered Owl--Otus trichopsis
Spotted Owl--Strix occidentalis

Goatsuckers

Poor-will--Phalaenoptilus nuttallii
Common Night Hawk--Chordelles minor
Lesser Night Hawk--Chordelles acutipennis

Swifts

Vaux's Swift--Chaetura vauxi
White-throated Swift--Aeronautes saxatalis

Hummingbirds

Black-chinned Hummingbird--Archilochus alexandri
Costa's Hummingbird--Calypte costae
Anna's Hummingbird--Calypte anna
Broad-tailed Hummingbird--Selasphorus platycercus
Rufous Hummingbird--Selasphorous rufus
Rivoli's Hummingbird--Eugenes fulgens
Blue throated Hummingbird--Lampornis clemenciae
Broad-billed Hummingbird--Cynanthus latirostris

Kingfishers

Belted Kingfisher--Megaceryle aleyon

Woodpeckers

Red-shafted Flicker--Colaptes cafer
Gilded Flicker--Calaptes chrysoides
Gila Woodpecker--Centurus uropygialis
Acorn Woodpecker--Melanerpes formicivorus
Lewis Woodpecker--Asyndesmus lewis
Yellow-bellied Sapsucker--Sphyrepicus varius
Williamson's Sapsucker--Sphyrapicus thyroideus
Ladder-backed Woodpecker--Dendrcopos scalaris
Arizona Woodpecker--Dendrocopos arizonae
Hairy Woodpecker--Dendrocopos villosus

Tyrant Flycatcher

Western Kingbird--Tyrannus verticalis
Cassin's Kingbird--Tyrannus vociferans
Kiskadee Flycatcher--Pitangus sulphuratus

Tyrant Flycatcher

Wied's Crested Flycatcher--Mylarchcus tyrannuius
Ash-throated Flycatcher--Mylarchcus cinerascens
Black Phoebe--Sayornis nigricans
Say's Phoebe--Sayornis saya
Hammond's Flycatcher--Empidonax hammondii
Grey Flycatcher--Empidonax wrightii
Western Flycatcher--Empidonax difficilis
Coues Flycatcher--Cantopus pertinax
Western Wood Pewee--Cantopus sardidulus
Olive-sided Flycatcher--Nuttallornis borealis
Vermilion Flycatcher--Pyrocephalus rubinus
Beardless Flycatcher--Camptustoma imberbe
Buff-breasted Flycatcher--Empidonax fulvifrons

Larks

Horned Lark--Eremophila alpestris

Swallows

Violet-green Swallow--Tachycineta thalassina
Tree Swallow--Iridoproene bicolor
Rough-winged Swallow--Stelgidopleryx ruficollis
Cliff Swallow--Petfochelidon pyrrhonota
Purple Martin--Progne subis
Barn Swallow--Hirundo rustica

Jays

Steller's Jay--Cyanocitta stelleri
Scrub Jay--Aphelocoma coerulescens
Mexican Jay--Aphelocoma ultramarina

Ravens

Common Raven--Coryus corax
White-necked Raven--Corvus cryptoieucus
Clark's Nutcracker--Nucifraga columbiana

Titmice and Verdins

Mountain Chickadee--Parus gambeli
Bridled Titmouse--Parus walloweberi
Verdin--Auriparus flaviceps
Common Bushtit--Pasltriparus minimus

Nuthatches

White-breasted Nuthatch--Sitta carolinensis
Red-breasted Nuthatch--Sitta canadensis
Pigmy Nuthatch--Sitta pygmaea

Creepers

Brown creeper--Certhia farailiaris

Dipper

Dipper--Cinclus mexicanas

Wrens

House Wren--Trolodytes aedon
Winter Wren--Troglodytes troglodytes
Bewicks Wren--Thryomanes bewickii
Cactus Wren--Campylorhynchys brunneicapillum
Long-billed Marsh Wren--Telmatodytes palustris
Canyon Wren--Catherpes mexicanas
Rock Wren--Salpinctes obsoletus

Mockingbird and Thrashers

Mockingbird--Mimus polyglottos
Brown Thrasher--Toxostoma rufum
Curve-billed Thrasher--Toxostoma curvirostre
Crissal-Thrasher--Toxostoma dorsale
Bendire's Thrasher--Toxostoma bendirie

Thrushes, Bluebirds, and Solitaires

Robin--Turdus migratorius
Hermit Thrush-Hylocichla guttata
Western Bluebird--Sallia mexicana
Townsend's Solitaire--Myadestes townsendi
Mountain Bluebird--Sialia currucoides

Gnatcatchers and Kinglets

Blue-grey Gnatcatcher--Polioptila caerulea
Black-tailed Gnatcatcher--Polioptila melanura
Ruby-crowned Kinglet--Regulus calerdula
Golden-crowned Kinglet--Regulus satrapa

Pipit

Water Pipit--Anthus spinolette

Waxwings

Ceder Waxwing--Bombycilla cedrorum

Silky Flycatchers

Phainopepla--Phainopepla nitens

Shirks

Loggerhead Shirks--Lanius Ludoricianus

Starlings

Starling--Sturnus vulgaris

Vireos

Hutton's Vireo--Vireo huttoni
Balls Vireo--Vireo balli
Grey Vireo--Vireo vicinior
Solitary Vireo--Vireo solitarius
Warbling Vireo--Vireo gilvus

Wood Warblers

Black and White Warbler--Mniotilta varia
Orange-crowned Warbler--Vermivora celata
Nashville Warbler--Vermivora ruficapilla
Virginia's Warbler--Vermivora virginiae
Lucy's Warbler--Vermivora luciae
Olive Warbler--Prucedramus taeniatus
Yellow Warbler--Dendroica petechia
Audubon's Warbler--Dendroica auduboni
Black-throated Grey Warbler--Dendroica nigrescenes
Townsend's Warbler--Dendroica townsendi
Hermit Warbler--Dendroica accidentalis
Grace's Warbler--Dendroica graciae
Chestnut-sided Warbler--Dendroica pennsyvlania
Northern Waterthrush--Sejurus novenboracensis
MacGillivray's Warbler--Oporornis tolmiel
Yellowthorat--Geathlypis trichas
Yellow-breasted Chat--Icteria virens
Red-faced Warbler--Cardellina rubrifrons
Wilson's Warbler--Wilsonia pusilla
Painted Redstart--Setophaga picta

Weaver Finchs

House Sparrow--Passer domesticus

Meadowlarks, Blackbirds, and Orioles

Western Meadowlark--Sturnella neglecta
Yellow-headed Blackbird--Xanthocephilus xanthocepilus
Red-winged Blackbird--Agelaius phoenices
Hooded Oriole--Icterus cucuillatus
Scott's Oriole--Icterus parisorum
Bullock's Oriole--Icterus bullockii
Brewer's Blackbird--Euphagus cyanocephalus
Boat-tailed Grackle--Cassidix mexicanus
Brown-headed Cowbird--Molothrus ater
Bronzed Cowbird--Tangavius aeneus

Tanagers

Western Tanager-Piranga ludouiciana
Hepatic Tanager-Piranga flava
Summer Tanager-Piranga rubra

Grosbeaks and Finches

Cardinal--Richmondena cardinalis
Pyrrhuloxia--Pyrrhulaxia sinuata
Black-headed Grosbeak--Pheucticus melanocephelus
Lazuli Bunting--Passerina amaena
Varied Bunting--Passerina versicolor
Evening Grosbeak--Hesperiphona vespertina
House Finch--Carpodacys mexicanus
Pine Grosbeak--Pinicola enucleator
Lesser Goldfinch--Spinus pinus
Red Crossbill--Loxia cuevirostra

Towhees and Buntings

Green-tailed Towhee--Chlorura chlorura
Rufous-sided Towhee--Pipilo erythrophthalmas
Brown Towhee--Pipilo fuscus
Abert's Towhee--Pipilo aberti
Lark Bunting--Calamospiza melanocorys

Sparrows and Juncos

Savannah Sparrow--Passerculus sandwichensis
Vesper Sparrow--Pooecetes gramineus
Lark Sparrow--Chondestes grammacus
Rufous-winged Sparrow--Aimophila carpalis
Black-throated Sparrow--Aimophila ruficeps
Oregon Junco--Junco oreganus
Grey-headed Junco--Junco caniceps
Mexican Junco--Junco phaeonotus
Chipping Sparrow--Spizella passerina
Clay-colored Sparrow--Spizella pallida
Brewer's Sparrow--Spizella breweri
Black-chinned Sparrow--Zpizella atrogularis
White-crowned Sparrow--Zonotrichia leucephrys
Golden-crowned Sparrow--Zonotrichia atricapilla
Fox Sparrow--Passerella ilicca
Lincoln's Sparrow--Melospiza lincolnii
Swamp Sparrow--Melispiza georgiana
Song Sparrow--Melospiza melodia

PLANT COMMUNITY TYPES

Our living, and therefore renewable, natural resources are represented by natural vegetation. Natural vegetation is structured into recognized world plant formations--the great formation-types--which, in turn, are comprised of plant communities that are distinctive in the species that they contain, their growth forms, abundance, landscape positions and other ecological features. Natural communities also are called biomes (= biotic communities),for they are characterized by the presence and interdependence of natural assemblages of distinctive animals and plants that are characteristic and identifiable from those of other biomes. Biomes are classified on the basis of their plant components, i.e., their vetetation (==structure) and their flora (==species).

Ecologists long have recognized that Arizona is the meeting place of several western biomes, and that seven of the major kinds of natural communites in the United States occur somewhere in Arizona, with six of these found on the Santa Catalinas. These communities include coniferous forest, deciduous forest, evergreen woodland, chaparral, grassland and desertscrub.

MONTANE CONIFER FOREST

(Referred to as conifer forest in the body of the Statement.)

Most of the upper portions of the Santa Catalinas are characterized by nearly pure stands of ponderosa pine, with Douglas-fir dominating canyons and the north-facing and east-facing slopes.

Most of the montane conifer forest lies between 6,000 and 9,157 feet elevation, and may extend downward in canyons and on north-facing slopes to approximately 5,500 feet. The climate is cool, and it is one of the driest conifer forests in North America. Although not characteristic of this biotic community, some corkbark fir are present near the top of the mountain.

The lower part of the montane forest, below about 8,500 feet, is warmer and drier and is primarily a forest of ponderosa pines, except on north-facing slopes. At midforest elevations, firs and ponderosa pine variously intermingle on all but north-facing slopes. Firs are dominant on north-facing slopes above 7,500 feet, and above 8,500 feet they become increasingly more prevalent in the forest on all slope exposures.

The principal trees are ponderosa pine, Douglas-fir, white fir, limber pine, Mexican white pine, Gambel oak, silverleaf oak, madrone (madrono), locust, bigtooth maple and quaking aspen. Shrubs are numerous and include buckbrush, rose, raspberry, ocean spray and snowberry; bracken fern is an abundant understory forest species. Principal grasses include mountain muhly, pine dropseed, Arizona fescue, pinyon ricegrass, squirrel-tail, mountain brome, spike muhly, deergrass, junegrass and bluestem.

1/ Adapted from Natural Vegetation of Arizona by C. H. Lowe and E. E. Brown - 1973.

As several grasses, forbs, shrubs and broadleaf trees occur more or less throughout the forest, there may be a several-layered understory, which is typical of mixed pin-fir mountain forest communities in southern Arizona.

RIPARIAN DECIDUOUS FOREST (Referred to as riparian)

The riparian communities comprise a limited geographic area that is entirely disproportionate to their landscape importance and recreational value, and their immense biological interest. They are comprised of tall, winter-deciduous broadleaf trees that are the same species and/or genera as in the eastern deciduous forest of the United States. In the arid and semi-arid Southwest, these remnants of earlier widespread forests are restricted to our streamways and drainageways, and at some lakes and ponds, that provide the necessary stream flow or underflow to support broadleaf forest species. These canyon and arroyo forests principally are located only in the sub-Mogollon region of the state, which includes the Santa Catalinas.

Both their distinctive life-form and their riparian habitat distinguish these biotic communites from the evergreen western woodlands and the coniferous forest through which they course fingerlike from our highest spruce-fir forests throughout woodland and chaparral into the grasslands and deserts below. The composition and form of the riparian forest changes witn elevation. Higher, in high evergreen woodland and in the coniferous forest, major broadleaf riparian trees are elderberry, boxelder, cherry, maple and mountain willows. Lower, in the lower woodland, chaparral and grassland into desertscrub, the riparian "big-five" are cottonwood, willow, sycamore, walnut and ash.

ENCINAL WOODLAND (Referred to as woodland)

The oak-dominated woodlands of the Santa Catalinas are Sierra Madrean in origin. On the Catalinas, the greatest development of these woodlands is reached on the foothills and lower slopes at elevations between 4,000 and 7,000 feet.

The word "encinal" refers to woodland communities that may be composed of evergreen oaks, or that are varied mixtures of oaks, junipers (alligator-bark and one-seed) and Mexican pinyon. Arizona cypress is a tall tree isolated in some relict stands within canyons. Much of the oak woodland of southeastern Arizona and adjacent Sonora is a purely oak-dominated community of one or more of three species -- Emory oak, Arizona oak, or Mexican blue oak.

INTERIOR CHAPARRAL

Chaparral occurs at intermediate elevations with woodland or coniferous forest above, and, ordinarily, grassland or desertscrub below. Hence, it generally is situated between 4,000 and 6,000 feet elevation. On the Catalinas, it is confined primarily to Oracle and Samaneigo Ridges.

There is considerable confusion as to what constitutes chaparral in Arizona. Dominant chaparral plants are characteristically tough-leaved evergreen shrubs that form a dense, brushy growth, usually closed or not widely open, of fairly uniform height between 3 and 6 or 7 feet, broken by an occasional taller shrub or short tree that usually is an oak or juniper. Scrub oak is by far the most frequently encountered species, and may account for over 90 percent of the stand in some areas. Interior chaparral receives a total annual rainfall of approximately 15 inches, predominantly during the winter half of the climatic year.

DESERT GRASSLAND

Desert grassland is a highly diverse grass-scrub type, where the grasses are comingled with various wood shrubs, including a number of uniquely desert grassland dry-tropic species, such as false mesquite, palmilla, sotol, beargrass, mesquite, crucillo and grassland species of cholla and other cacti. It is a peculiarly southwestern grassland community, centered, for the most part, near the international boundary. Most of the desert grassland on the Santa Catalinas occurs where there is from 12 to 15 inches of precipitation. The lower elevational limit of the desert grassland transition on the Catalinas is in the neighborhood of 3,500 feet, and it oridnarily prevails upward to approximately 5,000 feet elevation. The Redington Pass area is an example of a desert grassland type which has been invaded by shrubs to the point where it no longer gives a grassland appearance. It is felt this shrub invasion has occurred as a result of livestock grazing and lack of natural fires.

SONORAN DESERTSCRUB - ARIZONA UPLAND SUBDIVISION

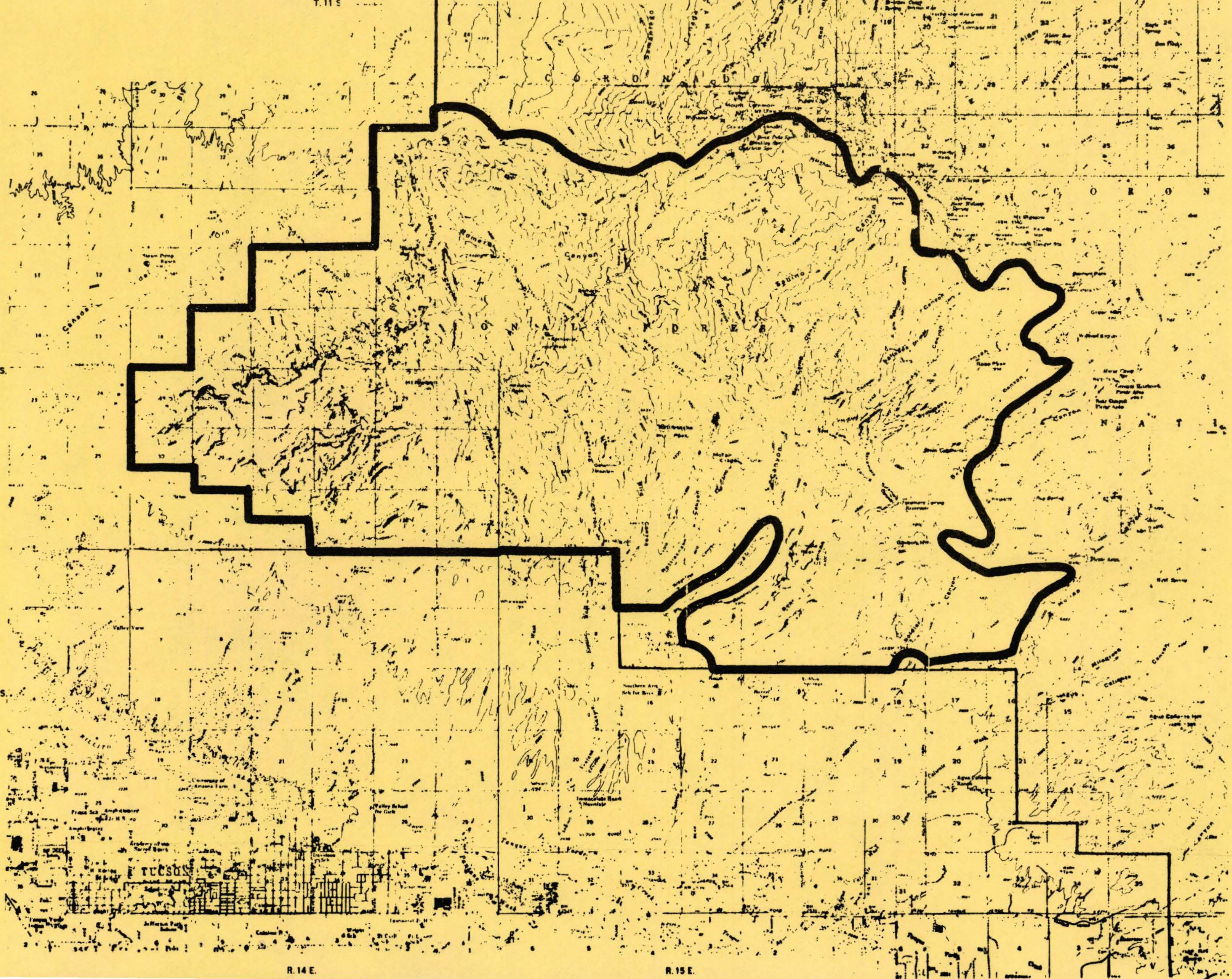
Magnificent, beautiful, majestic, picturesque, bizarre are words that have been used appropriately to describe this highly diverse and arborescent subtropical desertscrub community in southern Arizona and adjacent northern Sonora, Mexico. This is Arizona's giant cactus desert, which reaches its greatest development on rock and rocky soils of desert mountains and buttes, and on the similarly coarse soils of the upper bajadas that flank the rocky slopes of the mountain ranges -- hence the term upland desert. Best representation of the Arizona upland desert is on the coarse upland soils of granitic origin along the south slopes of the Santa Catalinas. Most of the community lies between 2,500 and 4,000 feet elevation; and the upper edge of the desert may receive 11-13 inches of annual precipitation.

In this, the home of the giant sahuaro (saguaro), more than 100 native desert plants of diverse form and function make up the plant matrix in any one of the various local habitats throughout the paloverde-sahuaro upland desertscrub. This is the most structurally diverse vegetation in the entire United States. Several species are subtropical desert trees, such as foothill paloverde, ironwood, crucifixion thorn and, in or near drainages, blue paloverde, netleaf-hackberry, desert willow and mesquite. In addition to several species of chollas, prickly pears, hedgehogs, fish-hooks and barrel cactus, large shrubs such as ocotillo, ratany and creosote bush may be present and among the local dominants.

One or the other of two shrubs, triangle bursage or brittlebush, almost always is present in the understory, as are many forbs and grasses, both annual and perennial. Annuals often present spectacular flower displays after the rainy seasons, with different sets of species following the summer rains and the winter rains.

PUSCH RIDGE WILDERNESS - PROPOSED
H. R. 3454

AS AMENDED


T. 11 S
T. 12 S.
T. 13 S.
R. 14 E.
R. 15 E.
C O R O N A D O
N A T
Canyon
Sabino
TUCSON

PUBLIC RESPONSE EVALUATION

Citizen involvement played an important role in the creation of Pusch Ridge Wilderness. The citizens who worked for its inclusion in the wilderness system had many ideas for its management, so the Forest Service sought to include them in developing this management plan.

A group of about 20 individuals representing many interests first met in September 1978 to give their advice on the process for writing a management plan. They also outlined the issues they thought would be important to solve with the management plan.

In October, 791 response forms were sent out to people who had expressed an interest in land use in the Santa Catalinas and had asked to be on the Coronado National Forest's mailing list. One hundred twenty-seven were returned (table follows).

Table 1

Pusch Ridge Wilderness Response Forms

	RESPONSE FORMS			
	Sent		Received	
Destination	Number	Percent	Number	Percent
Pima County	583	74	89	70
Rest of Arizona	95	12	10	8
Outside Arizona	113	14	28	22
TOTAL	791	100	127	100

The response forms were also an invitation to a day-long workshop held Saturday, November 28, 1978, at Mansfield Junior High School in Tucson. The workshop consisted of a combination of presentations by Forest Service and non-Forest Service personnel and small workgroup discussions. The goal was to get a consensus from the citizens present on a number of topics. People were randomly assigned to one of the five workgroups. About 50 attended.

Both the response form and small group discussion comments were compiled using content analysis. The comments are coded and grouped under common headings. Each returned response form was numbered serially. The response form contained five pieces of text for public comment.

Text #1 read:

BIGHORN SHEEP - HUMAN CONFLICT

The presence of Bighorn Sheep in the Wilderness adds to its sense of wilderness. Bighorn Sheep are disturbed by human presence. The population, estimated at between 70-100 animals, has been static for many years and could be increased with improved conditions. The sheep's need for privacy conflicts with people's desire to hike and enjoy occasionally, the sight of these magnificent animals. Options for management range from doing nothing, to restricting the number of people allowed in the area or restricting entry during certain seasons.

PLEASE COMMENT.

Text #2:

TRAILS

The Pusch Ridge Wilderness contains 105 miles of trails that are open for use to both hikers and horseback riders. They provide a wide range of challenge, varying from well developed and frequently maintained, to primitive trails that are infrequently maintained. New trails are proposed which would provide new shorter loop routes from Bear Canyon to Sabino Canyon, Romero to Cargodera Canyon, Bird Canyon to Esperero Canyon and Aspen Trail to the Box Camp Trail. There are no major conflicts between horseback riders and hikers on wilderness trails.

PLEASE COMMENT.

Text #3:

FIRE

For many years, fire played a relatively natural role in the ecosystem of the Pusch Ridge area. As man has become more and more involved in the management of the area, fire suppression has become more effective, resulting in partial elimination of fire as a natural agent in the ecosystem. This has resulted in unnatural fuel accumulation and degredation of wildlife habitat in many areas. Present policy requires that all wildfires be suppressed, regardless of time of year or whether or not the fire was man-caused or natural. A natural fire policy could be developed which would allow fire to play a more natural role in the ecosystem of this area. This could be allowed in all areas, except where such a policy would adversely affect adjacent resources or human values.

PLEASE COMMENT.

Text #4:

NATURAL AREAS

The Santa Catalina Natural Area was established in 1927 for protection and management of the area in a natural condition. This 4,131-acre unit is now included within the Wilderness where management direction favors the same prescription. Although current recreation use in the area is high, most use is confined to the developed trails which pass through the area. As a result, existing environmental impacts have been minimal. As the Natural Area was established by the Secretary of Agriculture, the possibility exists that this classification should be abolished since Wilderness classification meets these same objectives.

PLEASE COMMENT.

Text #5:

SOLITUDE

Pusch Ridge is one of the first wilderness areas immediately adjacent to an urban area. Opportunity for solitude is an important component for wilderness, and that includes the concept that solitude implies fewer users. This presents a problem in areas of heavy use, such as Sabino Basin, Seven Falls, Pima Canyon, Wilderness of Rocks, etc. As an example, the Seven Falls area receives as many as 600 visitors per day on spring weekends. These areas can be managed in a variety of ways, from letting present use continue, or restricting the number entering.

PLEASE COMMENT.

A comment that is coded 1-65 means it was taken from a written comment to text #1 by a person whose response form was the 65th received at the District office.

In the public meeting, eight questions were asked:

1. What is solitude?

2. What is a "wilderness experience?"

3. What does our (group's) definition of solitude and wilderness experience imply for a wilderness management plan?

4. Negotiate a policy statement (from the workgroup) on zones/or permits/ or restrictions. If zones, draw them on a map.

5. Which of the new proposed trails should be built, and what is your priority in building them?

6. General concerns about management of Pusch Ridge Wilderness that have not been discussed so far (except for fire and wildlife)?

7. Of what importance are Bighorn Sheep in the Wilderness; what conflicts exist with hunters and hikers and how should these conflicts, if they exist, be solved?

8. Should there be a natural fire policy or one of suppression?

Comments coming from the workgroups are coded W2-8. That means a comment from group 2 came in response to question 8. Where there are many codes following a statement, that means on all those response forms, or in all those workgroups, that type of statement was made.

Following, then, is a compilation of the public response received during development of the management plan.

POLICY STATEMENTS ON MANAGEMENT AND PERMITS

If we have permits, zones should be considered. Flexibility should be based on a monitoring system (because more data is needed).
W1-4

A consensus was reached of no permit.
W2-4

Regulate people by using access, i.e., size of parking areas at the trailheads to the point of no parking at all. The number of people can be limited by maintaining different levels of trail quality.
W3-4

There should be a zone based on uses or a permit system for the entire area. This will require a lot of public relations because people have had unlimited access in the past. The high use area should be zoned differently than low use areas. The areas now designated as high use areas will require no permit. Management should have a high visibility.
W4-4

Minority - (came in late)
Area has been managed quite well and we don't need to change the policy. Permits okay, but not to restrict people until the need has been established.
W4-4

Management Plan. We need to know number of people using a trail, and to assess the damage to biological features or solitude. There should be no more people than the biological features could withstand, as opposed to psychological needs of people. Solitude needs are less than the environmental needs.
W5-3

There should be flexibility; not too much control or emphasis by Forest Service with the possibility of a permit system in the future if it is absolutely required. The plan needs to define a level of use that must be met before permits would be needed.
W5-4

POLICY STATEMENTS ON TRAILS

Maintenance should be minimum needed to protect resources and allow for trail identification.
W1-5

Trails with heavy use should be maintained to a high quality. Parking areas could be used to indicate the amount of use for a particular trail. Trail standards should not be upgraded.

Minority statement: The number of trails should not be increased and the present ones should have a minimum amount of maintenance.
W3-5

There needs to be more study before making a new trail to Finger Rock. Concern is felt over the impact of the Sutherland-Cargodera Trail on bighorn sheep lambing areas. All other proposed trails are OK. Trails at the lower levels should be well-maintained. As you proceed to higher elevations, maintenance should drop off. No additional trails are needed.
W5-5

POLICY STATEMENTS ON BIGHORN SHEEP

Research should be done on bighorn sheep needs and the effect of visitors on them. Restrictions should be instituted, if necessary, to protect the bighorn herd, including a permit system if it is found necessary.
W3-7

There is a need to keep the bighorn sheep in the area which is quite small. There is a need to look at boundary lines for the zone and to limit use to certain areas by permit. To manage an area for sheep and people is the same thing. Minority opinion: People should come ahead of the bighorn sheep.
W5-7

POLICY STATEMENTS ON FIRE

Use prescribed fire. Let natural fires burn.
W5-8

It is desirable to have prescribed burning within Wilderness to protect lives and property outside the Wilderness if Forest Service policy can be changed. Then, the buffer zone around Organization Ridge should be excluded from the Wilderness. Natural fires should be allowed to burn unless they pose a danger to people or developments.

DEFINITION OF WILDERNESS EXPERIENCE

Feeling of being alone away from society, safety and comfort.
W4-2, W1-2, W2-2, W5-2

Basic necessities of survival - independence, self-reliance. Be comfortable with self.
W4-2, W1-2, W2-2, W5-2

Become close to the earth after a period of time.
W4-2, W1-2, W4-2

Wild place; see something not normally seen (not pointed out either).
W4-2, W1-2, W5-2

Can appreciate in couple of hours if removal is accomplished.
W1-2, W2-2

Expecting to see more people in Pusch Ridge than more remote wilderness. Different levels of wilderness.
W3-2, 5-92

Like to see or know City is close and contemplate both City and wilderness.
W4-2, W3-2

Designation does not make an area a wilderness.
W1-2, W3-2

Wilderness experience is sitting around a campfire.
W2-2

Reduce amount to rules and regulations - minimum amount.
W5-2, W5-1, W3-4

Wilderness have to be rugged and inaccessible
W5-2

DEFINITION OF SOLITUDE

But I do not think one man should be restricted in his freedoms for the sake of another man's solitude. We will have to learn to deal with each other.
5-18, 5-9

Tucson's nearness to Wilderness will detract from solitude.
w2-1

Adds to experience - contact with a few (3-4) small groups (2-3) people.
W1-1, W2-1, W4-1, 5-40, 5-122, W3-1, W5-1

These areas were set aside for all people. I disagree that solitude implies fewer users. But it depends heavily on what kind of users. I would stress training the public to respect nature and their fellow Wilderness users.
5-9, 5-30

Quietness in the area. Man-made noise bothers. Rifle range disruptive.
W1-1, W5-1

Solitude changes with your mood.
W1-1, W2-1, W4-1, 5-32, W5-1

Solitude is important - fortunately it is still available if you know where to look. Publicity should be limited.
5-81

HOW TO MANAGE FOR SOLITUDE

RESTRICT NUMBER OF USERS

The number of persons using the first 2 or 3 miles of the lower trails should not be restricted (unless traffic is so heavy that the trail or environment around it is damaged) because they are ideal for short weekend hikes. There should be some kind of registration for longer hikes for safety reasons (search and rescue) and some restriction or limiting of use may be indicated by the results of this regulation.
5-112, W2-3, W4-3, W1-3

Some areas, such as Seven Falls and Sabino, should be accessible to the public in a way that deeper wilderness areas cannot be due to their inaccessibility. Visitors to the area and the Catalinas should have the opportunity to use these spots, but they should not be allowed to totally ruin them, as (1) it sets a precedent they will follow elsewhere, and (2) ecosystems merge at some point and pollution will overflow into other areas.
5-63, 5-49, 5-91, 5-110, 5-21, 5-210, 5-21, 5-120, 5-10, 5-61, 5-16, 5-23, 5-86, 5-15, 5-114, 5-81, W1-3, W1-1, W3-3, 5-47

I think the amount of people entering these areas should be restricted.
5-100, 5-119, 5-68, 5-11, 5-19

Restrict the number entering to the carrying capacity of the area.
5-40, 5-55, 5-17, 5-107, 5-105, 5-103, 5-W3, 5-75, 5-76, 5-74, 5-78, 5-83, 5-62, 5-35, 5-42, 5-59, 5-45, 5-94, 4-74, 5-8, 5-43, 5-37, 5-14, 5-7, W4-3, W3-3

I believe as many as possible should be permitted to hike and use the area but restrict amount of time they can remain in an area. Not overnight, etc.
5-1

Restrict number of people entering area on certain heavy use holidays.
5-97, 5-31, 5-85, 5-95, 5-69, W1-3, 2-25

Restrict the use of Pima Canyon and Wilderness of Rocks. Manage the Sabino-Seven Falls areas for as many people as possible.
5-38

Restricted use in some areas may be necessary, due to high usage.
4-29, 5-89, 5-93, 5-46, 5-87, W2-3, W4-3, W3-3

Do not allow overnight camping in these heavy use areas.
5-74

Boy Scouts commonly hike the Wilderness of Rocks and Romero Canyon Trail. I hope this will not be restricted.

Restrict Number of Users (continued)

These areas should be closely watched. Should a problem of sanitation or litter occur, the number of visitors should be limited. Solitude in these areas would be impossible.
5-106, 5-101, 5-117, 5-88, 5-96, 5-80, 5-4

I don't favor restricting the number of entries onto public land. However, many persons using the area do not respect it. Serious users should not mind applying for free permits (this would eliminate the casual user) or to a sign-in, sign-out procedure (a safety measure, but having other features as well).
5-113, W3-3, W3-4, 5-102, 5-26, 5-20, 5-82, 5-111, 5-42, 5-56, 5-98, W1-3, W2-3

Don't require permit for day use.
W1-3

For management purposes, Pusch Ridge Wilderness should be divided into four types of functional areas:

1) RESTRICTED ACCESS WILDERNESS. Areas which because they contain rare or threatened species or ecosystems; interesting, fragile land forms; or important human cultural remains, should only be entered for scientific or educational purposes with permission of the Forest Service. The Bighorn Sheep area is such a place.

The next three areas should have planned carrying capacities and be developed with certain activities and goals in mind for their use.

2) UNRESTRICTED ACCESS WILDERNESS. Low carrying capacity; hiking, climbing, hunting, riding activities. Areas almost untouched by past or present human intrusion, which will have horseback and foot trails only. These areas can only be entered on foot or horseback with a fair amount of effort.

3) PRIMITIVE AREA. Low to moderate carrying capacity; hiking, climbing, hunting, riding activities. Areas only somewhat affected by past or present human activities. These areas will have horseback and foot trails only, which should be fairly well maintained. These areas can be entered easily on foot or horseback. Some of the short loop trails proposed connecting some parts of PRW may be in this type of area.

4) RECREATIONAL AREA. High capacity; hiking, riding, picnicking and other short term uses. Foot and horseback trails, as well as roads, picnic grounds, and information centers. Access via motor vehicle. These areas should be considered as if they were urban parks, and receive comparable planning maintenance and protection. Recreational areas should be buffered from the rest of Pusch Ridge Wilderness by natural barriers and where necessary by plant barriers, fences and other

physical separators. Sabino, Bear and Pima Canyons fall into this class.
5-114

MORE STUDY BEFORE RESTRICTIONS

A study needs to be done on the visitor use-damage equation for heavy use areas. A policy could then be based on this data as well as the noise factor.
5-79, 5-58, 5-114, W2-3, W4-3, W1-3, 2-15

Seven Falls is popular because of its water and accessibility. The need is there to accommodate those 600+ visitors so no restrictions should be placed on any popular spot! It would just create problems elsewhere. You know where the interest is and it should be accommodated there--not diverted elsewhere. (In this regard, Redington Pass should have a little more development of trails and posting of dangers. It is the water that attracts.)
5-52, 5-60, 5-57, 5-109

NO RESTRICTIONS

No one should be denied access into any part of a wilderness at any time as long as they don't violate the wilderness concepts. If people can't find solitude in Sabino Basin, Seven Falls, Pima Canyon or Wilderness of Rocks, then they can go elsewhere. I am 1000% against restricing the number of people into any area.
5-27, 5-104, 5-116, 5-64, 5-32, W1-3, W3-3, W5-3, 2-25, 5-72

Present use should continue.
5-28, 5, 5-30, 5-71, 5-108, 5-118, 5-41, 5-51, 5-34, 5-124

Manage Seven Falls, Hutch's Pool, Lemmon Creek as currently managed. No new restrictions.
5-84, 5-115, 5-53

If people find a crowded condition, chances are they will thin themselves out by going to a less crowded sector.
5-54, 5-39, W5-3

Another surprise which destroys my enjoyment of the outdoors is to all of a sudden find out I can't go somewhere because it is a restricted area. If I know ahead of time that there are restrictions and for what reasons, then I am prepared to accept them. However, to get out on the trail and have signs tell me I can walk here or build a fire there is a real slap in the face...remember I go out to increase personal freedom. A management policy of any recreation area must minimize restrictions and allow a maximization of personal freedoms to the extent that there is a minimal amount of adverse impact. Let there be no surprises. Let people know what to expect!!

NO RESTRICTIONS (continued)

I have hiked the Catalinas for years. Presently, while on a trail, a hiker told me that I now needed a permit to hike the area. Well, that's fine, except it surprised me and set up a whole series of frustrations and resentments that my personal freedom to hike these trails was being reduced.

You better have a real good reason for any restriction and let the public know what and why it is!

Any management policy of a recreation area must consider: 1) user impact, and 2) user needs and appreciation. In the outdoors, I get a sense of personal freedom. With increased population and increasing user restrictions, my personal freedoms while in the outdoors are being reduced. Although this frustrates me occasionally, I do realize and understand the need for some restrictions.

I suppose the most important aspect to user restriction vs. personal freedom is that there be no surprises!! If I am hiking 10 miles to a waterfall expecting to have the place to myself and get there to find 100 people, my frustrations will be immense! However, I won't go to Seven Falls to be alone. I would go there to be with people, and we need places where people can be with people too.
5-18

MISCELLANEOUS COMMENTS

More than one Wilderness Ranger to determine what is in the Wilderness and assess the use areas.
W1-3, W5-3

Humans screw up things (no one in Wilderness).
W4-3

NATURAL AREA

THOSE IN FAVOR OF CLASSIFICATION

Leave it alone.
4-50, 4-40, 4-62, 4-71, 4-91

We favor the same kind of management for the Santa Catalina Natural Area as established in 1927. Whether or not the name or classification is changed seems to be only a matter of semantics.
4-68, 4-9, 4-69

If the same objectives are met by both classifications, why bother to change it? If not, the more stringent should be maintained.
4-6, 4-54, 4-2, 4-6, 4-97

The technicalities go over my head. Whichever is more natural.
4-47

Why bother changing names when use and management are working out well now. Seems to me this worry over names is one thing that has screwed up our world today. You aren't gaining anything except more paperwork, something I would think you could do without.
4-57, 4-26

Retain designation and apply more careful management to area.
4-118, 4-11, 4-82, 4-35, W4-6 (minority)

I don't see any conflict or problem between the two as they both serve the same goals of preservation.
4-120, 4-114, 4-101, 4-52

The Natural Area classification should be retained in addition to the Wilderness classification to guarantee that research objectives can be achieved.
4-112

Whatever classification most protects this area (Santa Catalina Natural Area), I favor this. I personally think people tend to respect areas classified as such more than another area unclassified, perhaps because of legal reasons, I really don't know. I feel that it is "safer" under classification.
4-30

"Wilderness" is a more strictly-defined term than "Natural Area". Perhaps continued existence of the Santa Catalina Natural Area would provide an opportunity for relatively intense, resource-based recreation activities to take place while still maintaining the more primitive and remote qualities of the Wilderness Area.
4-15

THOSE IN FAVOR OF CLASSIFICATION (continued)

Believe that the original designation was Research Natural Area and that this designation embodied a specificity of use solely for research and educational purposes, actually setting the area so designated apart from other land classifications having recreational, wilderness, and similar orientations which, although they may incorporate preservation of natural features of scientific interest, do not have this as their exclusive focus.
4-92

Probably the trail system should be maintained. If keeping the Natural Area designation would ensure this, then no change is needed.
4-43

This really makes no difference to me. The "Natural Area" name is appropriate enough. Having the "Wilderness" title placed on it may make it sound more important. It does give it an air of distinction and uniqueness, which it is!
4-99

NATURAL AREAS

THOSE IN FAVOR OF DECLASSIFICATION

Zap it. (Majority) (9)
W4-6

In the interest of minimizing and unifying management problems, I think the Natural Area designation should be abolished in favor of Wilderness designation.
4-107, 4-72, 4-12, 4-25, 4-4, 4-16, 4-79, 4-89, 4-105, 4-3, 4-116, 4-3

Abolish the Natural Area classification.
4-20, 4-21, 4-17, 4-13, 4-75, 4-102, 4-51, 4-59, 4-60, 4-73, 4-61, 4-84, 4-44, 4-55, 4-64, 4-42, 4-20

Decisions should be left to management. They are aware of the future impact which would result from changes in classification.
4-63, 4-36

There is no need for two codes to be in effect unless the area is going to receive twice the protection it now receives. As long as the Wilderness classification follows the same guidelines that were established under the Natural Area in 1927, it seems unnecessary for two programs with the same objectives to be operating. It may look good on paper, but it smacks of bureaucratic impressionism. Hopefully, more stringent controls can be carried out under the Wilderness classification.
4-121, 4-108, 4-110, 4-81, 4-46, 4-23, 4-113, 4-10, 4-28, 4-23, 4-7, 4-28, 4-86

Not relevant unless management objectives would change.
4-80

If "natural area" is transferred to be classified as "Wilderness"--OK, but don't slant it to a more "developed" (?) classification.
4-95, 4-122, 4-74, 4-109

Yes, as long as the natural integrity of the area is maintained.
4-98, 4-87, 4-58, 4-32, 4-39

With the area classified as "Wilderness," there is no need to continue the classification as "Natural Area."
4-123, 4-31

If the same objectives are being met, the classification of Natural Area is redundant and unnecessary. Cut the administrative red tape and maybe it will even save us a few dollars.
4-53, 4-88, 4-94, 4-93, 4-45, 4-76, 4-104, 4-106, 4-119, 4-77, 4-33, 4-5

THOSE IN FAVOR OF DECLASSIFICATION (continued)

I believe the Natural Area should be abolished in light of Wilderness designation, and particularly since it is not being managed as a Natural Area should be.
4-117

Difficult to manage
W4-6

MISCELLANEOUS COMMENTS

Whatever its classification, there should be no more recreational use than already exists.
Have Wilderness people take care of Wilderness area--two bureaucrats are worse than one.
4-8

Do not allow overnight camping in the natural area. Post it so people will know where they cannot camp.
4-115

I believe the Wilderness should be preserved and the environment controlled, I hope. Pusch Ridge can remain a Wilderness area. If we do away with the Wilderness, we will eventually do away with the animals, trees, flowers, and shrubs. We need more controlled Wilderness areas in Arizona, and we need to fight to preserve them.
4-78

BIGHORN SHEEP

EFFECTS OF TRAILS ON HABITAT

I also think that the trails in the critical habitat areas should be reduced in number and in size if possible.
1-77, 1-82

Pusch Ridge - lot of off-trail use.
W5-7

No new trails please.
1-116, W1-7, 1-90, 1-97, 1-20

Anymore trails may have an adverse impact on wildlife.
2-11, 2-72, 2-97

Do whatever is necessary to provide optimum conditions for the sheep. Sheep are rare. Hiking trails are not rare; people can hike many other places. Re-route trails if possible, to avoid sheep. In the Inyo National Forest, California, only 25 people per day are allowed on trails where sheep graze in summer. This has caused few complaints and brought much praise.
1-61, 1-81

Property of sheep most important aspect of sheep habitat area. If trails endanger sheep --- close them.
W1-7

More on-trail conflict than off-trail.
W5-7

Bighorn Sheep habitat
a. Pima Canyon (Use restricted to trail now). Alamo too.
b. Romero (restricted to trail).
c. Lambing season.
W1-4

How to tie in trail use to Bighorn Sheep habitat area. Conflicts between sheep and people - possible disturbance of lambing area and/or breeding ground, by people using trails.
W5-7, 1-80

Trails have a small amount of use in high country.
W5-7

Stop maintenance on trails off of main trail.
W1-7

Perhaps some trails should be closed and abandoned to minimize human

EFFECTS OF TRAILS ON HABITAT (continued)

impact on the Bighorns. As above, usage of trails should be controlled as required to maintain the quality of the wilderness experience and minimize human impact.
2-107

Do the trails in this area have an effect on the sheep? If not, maybe other effects are imposing upon the Bighorn.
4-72

RESEARCH AND EDUCATION

Maybe better public information on this matter would help. Are they being hunted? What are their needs in the summer when most of the hiking occurs?
1-72, W4-7

Allow to use all necessary biological techniques as needed to maintain species (including use of helicopter).
W1-7

Environmental education, a major thrust.
W4-7

More studies in the field of how these animals are affected by how much human presence.
1-81

Immediate need for research information - expedite.
W1-7, 1-74, W4-7, W5-7

Education on restriction for lambing season.
W2-7

Restricting people from entering the Pusch Ridge area during lambing is impossible - how are you going to keep people out of Pima Canyon? What I would recommend is a general education campaign in press and schools emphasizing the spiritual and esthetic value of these animals. Their presence virtually in sight of a city the size of Tucson is a miracle.
1-47

Public information about Bighorn Sheep requirements - discourage people going into habitat area.
W1-7

I suggest setting aside a separate area for viewers where they can see in and the sheep will not be disturbed. Otherwise, I suggest complete restriction as preserving the wilderness is the most important issue.
1-78

RESEARCH AND EDUCATION (continued)

Long distance viewing from established viewing sites - interpretation.
W1-7

Strategic viewing spot off of Oracle Road
W1-7

MAINTAINING EXISTING MANAGEMENT

O.K. as is.
1-84, 1-108

I would recommend that proper management be given to the Bighorn habitat areas. I'm sure that prime habitat does not prevail over the entire area concerned. Therefore, good management practices could be initiated in a limited number of areas to improve conditions. Resource use of this area has already been severely restricted through wilderness classification. I see no reason to further restrict the uses of the resources by limiting people entry.
1-3

In four years of hiking in this area, I have never seen a Bighorn Sheep (darn)! It is my opinion that there must be plenty of areas where man does not disturb these animals - certainly there are many acres not reached by trail - and much of the western ridge is so rugged that few people bother to "bushwack". How could you "improve conditions" for the Bighorn in the area in a way that would increase the population? And is this a desirable goal? I surely would not want them destroyed or driven out - but since the herd has remained static for many years maybe we should accept that as an optimum number for this area.
1-68

If the new wilderness status means about the same number of humans (hikers) in the area as now, without wilderness designation, then I see no problem. Seems okay as long as numbers do not increase specifically on Pusch Ridge.
1-109, 1-53

We recommend that you do nothing as the difficult access and remoteness of the sheep range tend to protect the sheep; or, consider temporary, seasonal, reductions in hikers (not total restrictions), and only in the vicinity of the sheep range. Restrictions should not affect the entire wilderness.
1-100

The Pusch Ridge management is exceptionally good, it seems, in its existing situation.
1-69

I tend to disagree with the statement "Bighorn Sheep are disturbed by human beings". Enclosed are a couple of snapshots I took from my car

MAINTAIN EXISTING MANAGEMENT (continued)

while on vacation in Western Canada. This band of Bighorns came from about a quarter of a mile away when we stopped along the highway. They were very gentle and will eat almost anything. We had some potato chips and Ritz crackers which they loved. One Bighorn ram nearly knocked my side mirror off trying to get his head in the window after more potato chips. So you see, I think people should be allowed to continue visiting the area, and the animals will come to enjoy their presence.
1-70

There needs to be a balance between man and his needs, and sheep and their needs. I believe man is the most important, and we need areas to provide him with recreation. If the sheep population is 70-100, I think that is sufficient for an area of this size and there is no need to encroach into areas needed by man as long as we are insuring the existence of the sheep.
1-52, 1-64, 1-32

HUNTING

The amount of pre-hunting (for Bighorn) activity by those persons with ram permits should be somehow cut down. Sometime in the future, it may be necessary to restrict the number of people entering the area--at any time of the year.
1-20, 1-116

Hunting of sheep should be eliminated.
1-2, 1-47, 1-68, 1-31, 1-25, 1-101

I think the key issue here is not necessarily the control on the number of people into this specific area, but the control and use of firearms, weapons, and other forms of instruments which would disrupt the peace and serenity of the area. Restrictions could also be imposed on off-the-trail travel.
1-52, 1-100

Hunting must be continued to assure proper management and interest in this fine animal. Hiking and sightseeing in the sheep area should definitely be curtailed. The combination of people and pistol plinking in the area can do nothing but have negative impact on the population. I think some controls should be enforced during certain times of the year that would be better addressed by the Game Department than by me.
1-73

Illegal hunting has led to the present demise of sheep population.
W3-7

Hunting and photographing Bighorn are incompatible.
W3-7

HUNTING (continued)

I disagree. Game and Fish policy of going in and disturbing the sheep is more destructive than general use.
W3-7

However, the right of access of licensed hunters must not be infringed upon by quotas.
5-76

Restricting access to a limited number of people or by season would be difficult to enforce. Access by hunters, particularly the few sheep hunters each year, must be guaranteed in any plan.
1-76

I believe that it is important to preserve the stand of Bighorn Sheep in the Pusch Ridge Wilderness. Some efforts should be made to improve the conditions for their security. It seems rather senseless to me that we should be talking of increasing the population of the Bighorn Sheep in this area while still allowing the Bighorn hunt to take place every year. The hunt should be eliminated and if at some time in the future the number of sheep becomes too excessive (which I doubt), some should be transplanted and allowed to prosper in other ranges. I have been into the Pusch Ridge many times and still have not been blessed with the sight of any Bighorn Sheep.
1-6, 1-26, 1-65

RESTRICTIONS ON USE OF HABITAT

I do not favor restrictions as long as these Bighorns are hunted in the area. If population falls to a point that hunting within the specific area is not allowed, then (if needed) human entry should be managed to allow for repopulation of the species.
1-115

If restricting entry is necessary to protect the sheep, do it. Give the sheep a chance to increase.
1-55, 1-123, 1-80

Use of the upper parts of the trails starting at Calle Concordia and Linda Vista should be restricted when it would affect the sheep. Hang-gliders should be totally prohibited.
1-112

Watering areas should be off-limits to people.
1-120

This area should be managed to provide the best environment for the Bighorn Sheep.
1-15, 1-44, 1-85, 2-73, 1-124, W1-7

RESTRICTIONS ON USE OF HABITAT (continued)

To preserve or increase numbers of these animals, the very least that should be done is restrict numbers of people at any time, and close it to humans during breeding season.
1-37, 1-98, 1-56, 1-33, 1-83, 1-74, 1-75, 1-10, 1-11, 1,101, 1-43, 1-40, 1-71, 1-86, 1-37, 1-31, 1-9, 1-23, 1-12, 1-114, 1-97, 1-89, 1-105, 1-93, 1-92, 1-94, 1-35, 1-14, 1-17, 1-19, W2-7, 1-119, 1-121, 1-117, 1-120, 1-111, 1-107, 1-13, W4-7, 1-40

Need permit system to avoid conflict with Bighorn Sheep.
W5-7

Limit use. (Pima & Romero Trails)
W4-7

Right now, I see little need in restricting entry by limiting the numbers of people in the area. If the Catalina State Park is developed, this would change drastically.
1-38, 1-18, W4-7

Coordination with State & Park excluding development of area adjacent to it.
W2-7

I think that enough management should be applied to preserve the bighorn population at a level which is naturally stable, but no more (I know that this optimum level of interference is difficult to arrive at, though.)
1-122, 1-110

Day use area only.
W5-7

I disagree with that - it's for overnight use.
W5-7

Restrict people during lambing season to trails.
W4-7

Entry should be restricted during lambing season. If population responds over several years of such policy, it should continue. If not, possibly it should be abandoned and people left to hike where they want.
1-102, 1-103, 1-49, 1-42, 1-51, 1-60, 1-79, 1-77, 1-34, 1-99, 1-97, 1-104, 1-96, 1-95, 1-90, 1-91, 1-69, 1-36, 1-50, 1-45, 1-4, 1-24, 1-8, 1-5, 1-29, 1-30, 1-28, 1-7, 1-106, 1-21, 1-100, 1-113, W5-7, 1-116

RESTRICTIONS ON USE OF HABITAT (continued)

Restriction of entry should be done only if the sheep population appears to be declining.
1-54, 1-46

Effective management of these animals and their welfare is essential. Accurate information, however, as to tolerable levels of human presence should be sought before restrictions on people usage are invoked. Once such levels are established, then appropriate supervisory actions to limit human presence in the area of these animals should be established.
1-39, 1-59

Restrict the number of people allowed in area at all times. Restrict entry during hunting seasons, mating seasons, and during other times vital to safety for sheep.
1-62, 1-87

Could put on permit access system later.
W5-7

I would suggest that restricting this area to just backpacking hikers during certain times could be tried. By trying this method for one or two years would give the public time to decide if this procedure was satisfactory for their uses.
1-88

Herd preservation primary importance. Continuously monitored. P. Falcon are important, too. Discourage large groups of hikers from Bighorn habitat.
W3-7

GENERAL COMMENTS

The sheep population remained somewhat static since 1954 when the Arizona Game and Fish Department allowed selective hunting in this area. The installation of water projects in cooperation with the U.S. Marine Corps Reserve unit in Tucson helped create permanent water.
1-73

Concern with high use in the sheep habitat.
W3-3, W5-7

The Bighorn Sheep - Man conflict is a serious one.
1-74

Wildfires should be allowed to burn in these areas for Bighorn Sheep habitat, i.e., Pusch Ridge.
1-74

GENERAL COMMENTS (continued)

Control burning may encourage sheep habitat to expand eastward.
W1-7

Only conflict is human--mild at present.
W4-7

Protect the sheep
1-118

Provide for future
W2-7, 1-59

Bighorn Sheep are a natural part of the Wilderness. Pusch Ridge isn't Pusch Ridge without them. If no sheep, perhaps it wouldn't be a wilderness?
W5-7, W4-7

Lambing season at peak recreational use time.
W1-7

Whatever is done, walking, spitting, etc., will have an effect on the sheep.
W4-7

About 200 sheep in the area.
W5-7

Not that many left.
W3-7

Plan needs to be flexible as more data on sheep becomes available.
W2-7

Forest Service usually goes to non-restrictive permit system to get number of users.
W5-7

Leave options to management--see what needs changing when necessary.
W4-7

Need to place options on management--it isn't forever.
W4-7

Sheep population is not definitely known (quantity).
W5-7

Good relationship between sheep and other animals.
W5-7

GENERAL COMMENTS (continued)

Good habitat.
W5-7

Make people pay for violations - make examples.
W4-7

Level of enforcement, what percent of compliance is needed - harsh at first.
W4-7

Want to know that they are there.
W3-7

Re-introduction of Bighorn Sheep in other areas in the Wilderness.
W3-7

Introduce new genetic stocks from outside the area.
W3-7

Cattle are more of a threat to the sheep than all the people in Tucson.
1-38

FIRE

SUPPORT NATURAL FIRE POLICY

It seems to me that a natural fire policy should be employed in the Pusch Ridge Wilderness.
3-59, 3-101, 3-98, 3-24, 3-8, 3-104, 3-23, 3-12, 3-17, 3-18, 3-99, 3-39, 3-32, 3-25, 3-114, W2-8, 3-108, W1-8, 3-109, 3-110, 3-111, 3-112, 3-123, 3-122, 3-121, 3-119, 3-120, 3-115, 3-113, 3-107, 3-117, 3-124, 3-19, 3-11, 3-5, 3-15, 3-16, 3-3, 3-80, 3-78, 3-82, 3-77, 3-74, 3-6, 3-19, 3-79, 3-57, 3-54, 3-14, 3-10, 3-52, 3-13, 3-38, 3-92, 3-91, 3-34, 3-36, 3-37, 3-93, 3-76, 3-68, 3-47, 3-75, 3-64, 3-61, 3-81, 3-88, 3-46, 3-53, 3-86, 3-51, 3-50, 3-60, 3-42, 3-100, 3-35, 3-43, 3-96, 3-49, 3-95, 3-44, 3-26, 3-72, W4-8

LET NATURAL FIRES BURN, BUT SUPPRESS MAN-CAUSED FIRES

If a fire is man-caused, it should be suppressed. If a fire is natural in origin, let it burn. Is it possible to distinguish between the two?
3-97, 3-94, 3-56, 3-33

Any naturally-caused fires that do not threaten a development or a particularly sensitive area (such as the main Bighorn Sheep range on Pusch Ridge), should be allowed to burn. Fires that are obviously man-caused should be suppressed, unless they are in an area that would be helped by a fire (such as an area badly overgrown with brush). In these areas, controlled burnings would be helpful.
3-28, W2-8, 3-71, 3-30, 3-89

LET ALL FIRES BURN/NO SUPPRESSION

If it is now a wilderness, all fires should be allowed to burn - to fight fires violates the wilderness concept.
3-27, 3-21, W4-8

SUPPRESS ALL FIRES

I believe all fires should be suppressed.
3-106, 3-97, 3-65, 3-45, 3-89, 3-7, 3-4, 3-62, 3-103

NEEDS MORE STUDY

Fire could be confounding variable in the hiker-Bighorn, etc., management of the wilderness area; although I think it a relatively minor one. Nevertheless, I am distinctly in favor of prescription burns, managed wildfire, etc., and this also might be done in a way that augments the Bighorn-trail-plots. Again, before doing, please make some studies designed to objectively evaluate your problems!
3-58, 3-90, 3-102

USE OF CONTROLLED BURNS

We favor controlled burns; are against present policy of suppression. A "natural" fire policy is a poor second to controlled burns, but better than total suppression.
W1-8, 3-29, 3-31, 3-105, W2-8, W4-8

Probably fires will have to be set and carefully controlled at first to get rid of the accumulation of debris. After that, natural burning would seem to be the best policy.
3-55, 3-73, 3-87, W5-8, W3-8

Can use fire to open areas for sheep.
W5-8

GENERAL COMMENTS

Even more serious are the potential repercussions of someone getting killed or injured as a result of a natural fire policy in a remote area of Pusch Ridge Wilderness. The resultant uproar over Forest Service management could threaten not only fire policies, but many other Pusch Ridge Wilderness management policies as well. To minimize this possibility, large areas of Pusch Ridge Wilderness should be closed to _all_ access during fire-prone seasons, and some form of route and destination information should be collected all year upon entering "unrestricted access wilderness," and the more remote parts of the "primitive areas." The rescue and firefighting people will have an idea of where to look for people endangered by a fire.
3-114

Firefighting itself is destructive to wildlife.
W1-8

Use mechanical equipment in this wild area.
W5-8

Change boundaries to control burn critical areas if policy change not possible on prescribed burning.
W1-8, W2-8, W5-8, W5-6, W1-6

Restrict any new developments on boundary and buffer zones.
W2-8

TRAILS

EXISTING TRAILS, ADEQUATE

The trail system of the Catalinas is adequate at this time.
2-28, 2-37, W1-5, 2-50, 2-107, 2-116, 2-36

NO NEW TRAILS

No new trails should be made. This area should be kept as primitive as possible.
2-106, W5-2, 2-34, 2-12, 2-17, 2-8, 2-76, 2-89, 2-77, 2-110, 5-121, 2-97, 2-38, 2-100, W4-5, W2-5, 2-51, 2-56

No new trails, existing ones should be adequate.
2-62, 2-123, 2-121, 2-19, 2-42, 2-118, 2-93, 2-30

Would recommend that NO ADDITIONAL trails be constructed or permitted. The present network of 105 miles is more than adequate. More trails will mean more disturbance to the Sheep.
2-98

There should be maintained trails and NO trails should be constructed. Now that you have a wilderness, let it be a wilderness untrammeled by men - this also means maintained and constructed trails.
2-27

New trails should not be built between Bear and Sabino Canyons, or between the Aspen and Box Camp trails.
2-28

Do not create more trails in lower elevations.
W2-5

There are more than enough trails in the Pusch Ridge Wilderness. If you have money for and manpower for trail building, use it for back country rangers. I fail to see the need for any of the new trails listed above.
2-26

The western parts of Pusch Ridge should not be improved or their use encouraged.
2-69

WANT NEW TRAILS

The new proposed trails also seem like good routes and would cetainly be used. Certain areas must be maintained as more wild areas - free of heavily used trails. The actual Pusch Ridge (and west side) would be a

WANT NEW TRAILS (continued)

good area to leave as is with no new trail construction. There are many people who like an off-trail experience also.
2-116

Should be managed for recreation--better trails, better signs.
W2-6

More trails might be necessary. Forest Service patrols should be in evidence more than in the past.
2-120

I believe if shorter routes are made, some old ones should be eliminated; since this area is close to a city the size of Tucson, too many trails and too many people would only disturb wildlife and vegetation.
2-33

More trails to prevent cross-country travel.
W2-5

Determine need for trail (a) provide a shorter loop.
W2-5

It would seem that the term wilderness would suggest that it would be more appropriate to build new trails or facilities in that portion of the Santa Catalina Mountains to the east of the Pusch Ridge Wilderness than within it. Many hikers are more involved in an ego experience or a social experience than they are in a wilderness experience. Provide it for them in areas outside of the area with Wilderness classification!
2-92, W2-5

Probably trails east of Sabino Canyon would be acceptable to retaining the uniqueness of the area.
I agree with proposal for new trails. They would help to disperse number of people on existing trails.
2-53, 2-49, 5-85, 2-60, 2-85, 2-105, 2-87, 2-47, 2-117, 2-109, 2-122,
2-80, 2-116, 2-114, 2-124, 2-68, 5-3, 2-71, 2-16, 2-74, 2-13, 5-6, 2-102

Construct new trails selectively, as needed.
2-32, 2-84, 2-88, 2-44

The new trails proposed will roundout the system. I see no need, beyond those new trails, for additional trails.
2-115

The primary use of wilderness resources is allowed (other than possibly some grazing). This singular use should be developed to maximize the benefits that citizens may now expect from the resources. More trails should be built, shorter trails, better access to trails, better

WANT NEW TRAILS (continued)

facilities at trailheads, etc., all to increase the accessibility and opportunity for the public to utilize the wilderness resources.
2-15, 2-5

The new trails sound fine.
2-46, 2-91, 2-94, 2-104, 2-83, 2-57, 2-101, 2-54, 2-83, 2-113, 2-63, 2-20, 2-61, 2-113, 2-31

The proposed new trails are acceptable only after it is definitely established that there will be no adverse effect on the wildlife, including on the Bighorn Sheep.
2-35, 2-81, 2-63, 2-59, 2-6, 2-7, 2-58, 2-49

The additional trails are needed. The need will increase in the future because of increased population and the development of Catalina State Park.
2-64

Sounds like a good idea to provide better trails.
2-103, 2-107

TRAILS ACCESS

Trail access, especially at these points, should be established now--and some off road parking space provided. The spread of housing in the foothills has all but closed off access to the Pontatoc Ridge Trail--except at Alvernon, which is already crowded. Access to Ventana should be reestablished, if possible.
W4-5, 2-122

Work with county to gain access.
W4-5

Consider condemination for access.
Why not more access points and more trails.
5-32

Where trails may take off from Hitchcock Highway, in the future we think parking should be provided in Wilderness Area in order to prevent hazards from excessive parking on highway.
2-124

No new access points on western boundary. Limit existing trails--do not expand.
W1-4

TRAILS ACCESS (continued)

As Tucson grows, easily accessed areas are going to get more use--most favorable way is, again, simply make it harder to get there.
5-82

Hikers should have access to such areas.
5-65, W1-6

HORSES AND HIKERS ON TRAILS

There should be some trails which allow no horses in a wilderness area. Some horses may be allowed where facilities provide for them, but there should be limits on where they can go.
2-40, 2-102, 2-18, 2-43, W1-4

Horseback entry should be restricted if use becomes too heavy.
2-101, 2-23, 2-103

Horseback riders have never caused any problems for me.
2-29, 2-73, 2-99

Horseback riding is a popular sport in Tucson, and I feel a valid use of a wilderness area.
2-18, 2-45, 2-15

Horseback riders should be restricted to trails only.
2-115, W1-4

Do not encourage horses with current trail standards.
W1-5

If you make new trails, please have separate trails for hikers. I hate hiking in horse manure and the dust created by the horses' hoofs. The combined trails in Big Bend and North Park are a horrible example!

TRAIL MAINTENANCE

The main trails should be kept well maintained, with some sections brought up from primitive to maintained, such as the lower Box Camp Trail above Sabino Basin.
2-23, 2-117, 2-92, 2-76

While the new trails are important, more money should be used in repairing existing trails to keep them in safe condition.
2-112, W4-5, 2-32, 2-74, 2-97, 2-84

TRAILS MAINTENANCE (continued)

Leave the primitive trails primitive and unmaintained, and only nominally maintain the more heavily traveled trails.
2-34, W4-5, 2-78, 2-39, 2-17, 2-86, 2-10, 2-102, 2-95, W5-2

...and discontinue maintenance of existing trails. A wilderness area should be a "wilderness" area.
2-17

Standards in general:

a. Maintenance only in high-use areas.
2-117, W4-5, 2-74

b. Policy statement--maintenance should be minimum needed to protect resources and allow for trail identification.
2-92

c. Control ventures off regular trail--encourage people to stay on trail.

d. Allow interior trails to disintegrate naturally--minimal maintenance for resource protection--identify trail.

I am totally in agreement with this. Trails proposed should be maintained and well marked.
2-104, 2-74

It is good for people to be able to hike, to have long trails and short trails--but they must be policed and supervised, kept clean and that seems to be your job. Are you staffed to do this right?
2-39, 2-2

Every trail in Wilderness be maintained as a foot trail.
W3-5

More signs needed:

a. Pima Canyon trailhead
b. Interior signs--wood only
c. Boiler plates OK at heads
W1-5, W3-4

Give public information on trails to be maintained.
W4-5

Volunteer maintenance of trails.
W4-5

No pavement or foreign rocks.
W4-5

TRAILS MAINTENANCE (continued)

Sounds great. It is hoped that by maintaining present trails and providing shorter routes, more people would take advantage of them--thus developing more awareness of and appreciation of the environment. Now, if we could only teach trail tidiness!
2-113

The emphasis should be on the more primitive trails and the longer ones in order to attract mainly the people that are sincerely interested in enjoying Pusch Ridge as a wilderness and not so many as a Sunday picnic area.
2-89, 2-25

COMMENTS ON INDIVIDUAL TRAILS

Esperero Trail

Not much choice.
W5-5

No access.
W5-5

Want a short loop trail
W5-5

How many miles? --about 5.
W5-5

Revegetate parts of Esperero trail.
W5-5

Close trail and let it revegetate naturally? How to do?
W5-5

If make new trail, do something with old trail.
W5-5

Temporary sign where you revegetate.
W5-5

Concern on Esperero Trail--maybe consider condemnation.
W1-5

Fix Esperero Trail--#1 priority.
W3-5

Finger Rock Trail

People like to walk in the riparian area. Will people walk on new trail? Need more information and impacts on environment of new trail.
W2-5

Leave Finger Rock Trail - maintain first three (3) miles better. Relocation through wash.
W1-5

Erosion problems in Finger Rock Canyon
W1-5

Finger Rock Trail should remain the same.
W3-5

Finger Rock-many people at beginning also, so won't help riparian area.
W4-5

Finger Rock is popular trail. Would be risk of people still using old trail if you build a new one.
W5-5

Finger Rock Trail - Proposed to be rerouted.
W5-5

Sabino Canyon/Bear Canyon Trail (Saddleback)

Trail between Bear Canyon and telephone good idea.
W3-5

Why Bear Canyon to Sabino Canyon?
2-98

I favor the proposed new trails, particularly the Bear Canyon to Sabino Canyon loop route.
2-79

Don't want side trailing up to Thimble. Impact to Ridge top.
W2-5

Don't like a saddle-back trail-too visible.
W2-5

Develop Rattlesnake Canyon instead of Saddle Back
W2-5

COMMENTS ON INDIVIDUAL TRAILS (continued)

Ventana

I would also suggest a possible new trail into Ventana Canyon to bypass the ranches that restrict access, if you can't work out a solution for hikers to get into Ventana. It is a great canyon and it is ridiculous that it can't be hiked except after 8:00 a.m., and on permission (unless you go cross-country from Craycroft and over the hills.
2-57

If other nearby areas, such as Ventana and Esperero, were more accessible, perhaps the pressure could be relieved at those areas mentioned.
5-13

Open Ventana access to relieve pressure--Pima and F.R. Trails.
W2-3

Trail access to Ventana needs to be resolved.
2-109

Guaranteed trail access to Esperero, Ventana, Alvernon, and Pima Canyons should be part of the plan.
2-109

Wilderness of Rocks

Limit use in Wilderness of Rocks.
W1-4

Fire rings in Wilderness of Rocks Trail and Westfork Trail. Better distribution.
W1-4

Pima Canyon

Pima Canyon type III--eliminate horses.
W3-5

Limit use going into Pima Canyon. Tie loop to Pantatoc Ridge.
W1-5

Pima Canyon Trail--restrict use to main trail.
W1-7

Sutherland-Cargodera

1. Parking areas excluded.
2. Green areas are exclusions.

COMMENTS ON INDIVIDUAL TRAILS (continued)

3. Shouldn't have this trail. Maybe permits during Bighorn lambing season.
W5-5

Undecided on Sutherland Trails.
W3-5

No new trails in Bighorn area, except Cargodera connection.
W2-7

Only new trail needed--Sutherland and Cargodera connection.
W4-5

Both trailheads of Cargodera Trail and Romero in one. Starting from Romero excluded area.
W2-5

The Romero to Cargodera Canyon trail may endanger the Bighorn by encouraging more people to use Bighorn habitat.
2-20

Romero to Cargodera and others sound ok.
2-98

OTHER TRAILS

Question about Molino Trail from Prison Camp to highway.
W2-5

Type III for trail leading into the Youth Camp.
W3-5

Box Camp to Marshall's Gulch undecided.
W3-5

Box Camp Spur Trail should be rerouted to Aspen Trail.
W2-5

I would like to see a connecting trail between Aspen Trail and Box Camp Trail, but little trail construction beyond that.
2-8

Look at Bird Canyon Trail and reroute to avoid developing all of Bird Canyon.
W2-5

Bird Canyon access good idea.
W3-5

OTHER TRAILS (continued)

San Pedro to Bigelow is a good idea.
W2-5

Alamo Trail - will Forest Service mark it as a trail? State Park wants to close it. Forest Service should not recognize it.
W5-5

GENERAL COMMENTS

Some cross-country doesn't bother lay of the land.
W2-3

Trails do not give solitude to elderly/handicapped.
2-1

Trail will not bother aesthetics.
W2-5

It is important to have a trail system that provides a variety of challenges.
2-75, W5-2, 2-114, 2-9, W4-5, 2-15, 2-4, 5-6, 2-21,

Short loops good for family and children.
W2-5

Shorter loop trails might mean heavier use.
2-55

SAHC maps outline trails.
W5-7

Colorado trails - aerial photos if you want to go to area you could see -- but on ground no markers -- it was very good.
W5-2

Better construction of trails to reduce impact and visibility.
W2-5

Shortened trails encourage access since fewer people are able to hike the longer, more stressing trails.
2-82

GENERAL COMMENTS

WILDERNESS BOUNDARY

May I respectfully suggest that the problem you mention in this section is twofold: 1) A probably well-intentioned, but foolish attempt to include too much area in the wilderness unit and, 2) the failure to establish the internal boundaries of the unit along surface drainage divides. You will always encounter conflicts if you try to define the upper slopes of a segment of a canyon as wilderness when the stream channel area is heavily used, e.g., Middle or Lower Sabino Canyon (Basin).
5-92

Use Mount Lemmon Highway.
W5-6, W5-8

Seven Falls same as ever.
W5-6

Don't use Mount Lemmon Highway as boundary.
W5-6

Need buffer zone for management options prior to coming on to Wilderness. Wilderness, i.e., fire breaks, wildlife.
W1-6

I don't believe Seven Falls, Sabino Basin, Pima Canyon should be included in "wilderness" because there are too many people (and their dogs) who enjoy these areas as they are now; and they can be reached with limited hiking experience. They make a pleasant day's outing.
5-44, 5-74, W2-6, W5-6

First, where at all possible, I think this wilderness area should be expanded. I don't think that access should be restricted, but rather more areas added to spread out the human population density.
5-77

MANAGEMENT PHILOSOPHY

Land comes before the recreation user.
W1-7

This question is a complex one. Depending on what kind of uses are occurring, their effects on natural resources and features, and the "seasonality" of these activities, a plan could, or should, be drawn up to clarify goals of what the public wants and how you can provide it.
5-99

As a general policy, we feel that the Wilderness should be managed to best benefit the people of Tucson and other communities. We feel the

MANAGEMENT PHILOSOPHY (continued)

area would have been better managed as a roadless area or scenic area and do not thank those misguided folks that gave us a Wilderness in view of major population centers - a perversion of the Wilderness concept. We favor economy in government.
5-99

Aesthetics is a philosophy not defined the same by all people. "Quiet areas" can be established by natural barriers as well as by regulations. A balance of overall management regulations should be considered and not an isolated intangible concept.
5-73

Flexibility in plan.
W3-4

Expanding population.
W3-4

Should be managed as a high quality area.
W2-6

Benefit more people.
W2-5

EDUCATION

Can anything be done to convince people to treat the Wilderness with respect?
5-72, 5-2, W2-6, W4-6, W2-3, W2-1, 5-114, 5-121, 5-47

Forest Service needs more publication on who they are.
W4-6, W2-6

In short, please don't attempt to "sell" the Wilderness classification on the basis of its amenities as a travel agent does a tourist itinerary.
W3-4

Educate about plants and animals to protect area.
W4-6

A Forest Service Pusch Ridge map should be designed and available to public.
2-74

Signs or informational sheets. Maps should show PERMITS/RESTRICTIONS.
W3-4

MISCELLANEOUS

Restrooms and garbage disposal areas at trailheads (Pima and Finger Rock) would provide relief if people were encouraged to use them. The numbers using the aras should be limited to the amount that can be safely supervised. There have been too many deaths in the Seven Falls area due to unsupervised hiking and increase usage by hikers and picnickers.
5-5

Nothing has been mentioned about grazing permits in the wilderness. They should be reviewed and consideration should be made on each one. The Romero Allotment causes no harm, creates another interest in the area's well being and offers additional assistance in patrol and observation by the lessee in determining detrimental impact by people.
6-73

Fix the fence on the north side of Pusch Ridge.
1-38

However, I also feel if there are that many visitors, then more areas should be developed. A cool swim in a man-made lake (such as Rose Canyon where swimming is restricted), is much more appealing than a packed-in, chlorine-controlled, cement pool.
5-78, 5-89, 5-2

The project to contain the sewage from Summerhaven should be implemented to the fullest and severe penalties imposed on future offenders. "Clean" water in the Sabino watershed is essential for the health and enjoyment of the canyon at all levels. Cleaning up the creek would allow for the reopening of the Marshall Gulch picnic/camping area.
6-68, 6-48

Suggestion: Have frequent, staggered patrols of ticket-writing rangers who follow up on "Don't Pollute" warning signs.
5-81, 5-8, 2-118, 5-30

Restriction in marginal areas--

1. Reservations
2. Open--no areas designated for walk-ins.
   5-90

Now the people who don't want to be crowded (solitude) probably have more available areas now--4,131 acres?
5-2

Reestablish indigenous species when possible--eliminate exotics. USE PESTICIDES.
W1-7

Fishing for native species a greater challenge.
W1-7